YEARLY STATUS REPORT - 2020-2021

Part A	
Data of the Institution	
1.Name of the Institution	NANDHA ENGINEERING COLLEGE
• Name of the Head of the institution	Dr N. RENGARAJAN
• Designation	PRINCIPAL
• Does the institution function from its own campus?	Yes
• Phone No. of the Principal	04294 – 225585
• Alternate phone No.	
• Mobile No. (Principal)	7373712234
• Registered e-mail ID (Principal)	principal@nandhaengg.org
• Address	Vaikkalmedu, Pitchandampalayam (Po), Erode-52
• City/Town	Erode
• State/UT	Tamilnadu
• Pin Code	638052
2.Institutional status	
• Autonomous Status (Provide the date of conferment of Autonomy)	17/08/2012
• Type of Institution	Co-education
• Location	Rural

• Financial Status	**Self-financing**	
• Name of the IQAC Co-ordinator/Director	**Dr. S. KAVITHA**	
• Phone No.	**04294 – 225585**	
• Mobile No:	**9942215651**	
• IQAC e-mail ID	**iqac@nandhaengg.org**	

3.Website address (Web link of the AQAR (Previous Academic Year)	https://nandhaengg.org/wp-content/uploads/2022/01/AQAR-2019-2020.pdf
4.Was the Academic Calendar prepared for that year?	**Yes**
• if yes, whether it is uploaded in the Institutional website Web link:	https://nandhaengg.org/academic-calendar/

5.Accreditation Details

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 2	**B**	**2.54**	**2015**	**15/03/2015**	**02/03/2020**

6.Date of Establishment of IQAC	**01/12/2014**

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/ Department/Faculty/School	Scheme	Funding Agency	Year of Award with Duration	Amount
Dr.D.Vanathi	Smart India HACKATHON 2020	MSME	01/08/2020	0
Mr.S.Muruganatham	MoE's Innovation Cell	AICTE	16/02/2021	0
Dr.S.Arumugam	Fellowship Award	Computer Society of India, CSI 2020	16/01/2020	0

8.Provide details regarding the composition of the IQAC:

- Upload the latest notification regarding the composition of the IQAC by the HEI

View File

9.No. of IQAC meetings held during the year   4

- 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

10.Did IQAC receive funding from any funding agency to support its activities during the year?   No

- If yes, mention the amount

11.Significant contributions made by IQAC during the current year (maximum five bullets)

• Introduction of Fast track courses • Credits for online courses • Peridical Academic Audits • Skill development programme for faculty members and students • Knowledge Enrichment webinars for students

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
Collaboration with industries to be strengthened.	In order to increase the collaboration with industries, One credit courses offering has been taught by industry experts. Students have been motivated to undergo Internships and the same will be considered for credit exemption.
Enhancing the skill development activities through IIC (CiPD – Centre for innovation and Product Development)	IIC of Nandha Engineering College has been awarded five star and four star rating by the Ministry of Education (MoE) for innovation and start-ups for the year 2019-2020& 2020-2021 respectively. BI of NEC has been funded with Rs.15 lakh for the idea Roll and Pull Uprooting Machine which is helpful to the small and marginal farmers to harvest Tapioca with less manpower.
Implementation of Learning through Online Tools	Various online tools including zoom, Google classroom, Cisco webex were introduced for effective Teaching and Learning
Digital platform for placement practice tests	Introduced
Academic Audit	Monitor the academic activities such as syllabus completion, performance of the student, etc.,
Proctor	All the Students are monitored individually for their academic and personal growth. Every 20 students are allotted to a proctor.
Internship	Students are motivated to undergo internship to gain skill

	and knowledge that is needed to work in a professional environment.
Feedback System	Students provide feedback on faculty, academic and non-academic facilities. Feedback is considered as a measure in the individual faculty appraisal.
Research activities	The Institution has conducted various webinars, workshops, and FDPs to promote research in the areas of patents filing, improving research visibility, etc.

13.Was the AQAR placed before the statutory body?	**Yes**

- Name of the statutory body

Name of the statutory body	Date of meeting(s)
MANAGEMENT - IQAC	19/01/2022

14.Was the institutional data submitted to AISHE ?	**Yes**

- Year

Year	Date of Submission
2020-2021	25/03/2022

Extended Profile

1.Programme

1.1   15

Number of programmes offered during the year:

File Description	Documents
Institutional Data in Prescribed Format	[View File]

2.Student

2.1 **2819**

Total number of students during the year:

File Description	Documents
Institutional data in Prescribed format	[View File]

2.2 **849**

Number of outgoing / final year students during the year:

File Description	Documents
Institutional Data in Prescribed Format	[View File]

2.3 **2784**

Number of students who appeared for the examinations conducted
by the institution during the year:

File Description	Documents
Institutional Data in Prescribed Format	[View File]

3.Academic

3.1 **546**

Number of courses in all programmes during the year:

File Description	Documents
Institutional Data in Prescribed Format	[View File]

3.2 **225**

Number of full-time teachers during the year:

Extended Profile

1.Programme

1.1 Number of programmes offered during the year:	**15**

File Description	Documents
Institutional Data in Prescribed Format	View File

2.Student

2.1 Total number of students during the year:	**2819**

File Description	Documents
Institutional data in Prescribed format	View File

2.2 Number of outgoing / final year students during the year:	**849**

File Description	Documents
Institutional Data in Prescribed Format	View File

2.3 Number of students who appeared for the examinations conducted by the institution during the year:	**2784**

File Description	Documents
Institutional Data in Prescribed Format	View File

3.Academic

3.1 Number of courses in all programmes during the year:	**546**

File Description	Documents
Institutional Data in Prescribed Format	View File

3.2 Number of full-time teachers during the year:	**225**

File Description	Documents
Institutional Data in Prescribed Format	View File

3.3 Number of sanctioned posts for the year:	**225**

4.Institution	
4.1 Number of seats earmarked for reserved categories as per GOI/State Government during the year:	**609**
4.2 Total number of Classrooms and Seminar halls	**63**
4.3 Total number of computers on campus for academic purposes	**926**
4.4 Total expenditure, excluding salary, during the year (INR in Lakhs):	**643.69**

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 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.

Curricula and syllabi are devised in line with the emerging technologies and are revised to incorporate recent developments. Design and development of curricula and syllabi are carried out in alignment with department's Vision and Mission, Program Educational Objectives (PEOs), Program Outcomes (POs) and Program Specific Outcomes (PSOs).

The Course Outcomes of each subject, POs and PSOs are framed with the views of Internal and External stakeholders. Curriculum, COs, POs and PSOs are evaluated and analyzed every year by the Programme Assessment Committee (PAC) Members and Department Advisory Board (DAB) Members.

Curriculum is framed by involving the stakeholders (students, alumni, industries and peers) and experts in the field of studies concerned. The revision and reframing of curriculum is based on advanced technologies and suggestions from stakeholders. The suggestions are reviewed by the Chairman of Board of Studies (BoS). The recommendation from the Chairman and the expert is taken into account and the framed curriculum is submitted for approval in BoS. Standing Committee consolidates the inputs received from BoS and submits to Academic council for consideration and approval. Academic Council scrutinizes and approves the proposals of BoS with regard to courses of study, academic regulations, curricula, syllabi and modifications.

Outcome Based Education (OBE)

OBE is adopted by the Institution since 2015-16. Curriculum is designed with the inputs of Governing Body, Academic Council, BoS and stakeholders. Keeping OBE in forefront, changes in regulations, inclusion of open elective system and embedded courses are made besides introducing add/drop courses for students enabling them to study the courses in advance and to pursue internships from second year onwards. Besides, Project based Learning, offered in second and third year, gives students an opportunity to enhance their knowledge by engaging themselves in projects set around the challenges of real world.

Choice Based Credit System (CBCS)

The Institution adopts CBCS since 2015-2016 to provide freedom to students to select courses which enable them to learn at their own pace, undergo additional courses, acquire additional credits and adopt an interdisciplinary approach to learning. It provides flexibility in designing curriculum and assigning credits based on course content and hours of teaching.

Curriculum on National, Regional and Global Developmental Needs

Curriculum is developed considering the needs at the regional and national levels to promote global competencies and to resolve environmental, ethical and social issues. This target is achieved

by offering courses like Soft Skills, Employability Enhancement and Analytical Skills, Waste Management, Personal Values, Professional Ethics and Human Values and also through clubs like NSS, YRC and Tree Plantation club.

Curriculum enables lifelong learning through Value added Courses, online courses and MoUs with Corporates like Virtusa and Infosys address the requirements of the current scenario. Besides, the Open Electives like Waste Management, Waste Water Treatment and Renewable Energy Technology educate the students about the pressing challenges. Furthermore, employability skills of the students are developed through In - House companies such as I GEN and Thulliam. Curriculum and training help the students to be employable at National and Global level.

File Description	Documents
Upload additional information, if any	View File
Link for additional information	https://nandhaengg.org/curriculum-development/

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

14

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

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

410

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

1.2 - Academic Flexibility

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

49

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

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

17

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

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

Nandha Engineering College endeavors to inculcate ethics and

values in students community in order to make them better citizens. Curriculum for all the programs is designed by including courses pertaining to Professional Ethics, Gender, Human Values and Environment and Sustainability. As a supplement of this endeavor, the Institution organizes various activities such as Seminars, Guest Lectures, Workshops, Awareness Programs etc, throughout the year as part of the curriculum that helps in integrating cross-cutting issues.

Professional Ethics:

The curriculum encompasses courses that address Professional Ethics such as, Business Ethics, Professional Ethics, Corporate Social Responsibility and Governance, Personality and Character Development, Principles of Management, Ethics and Cyber Security, Human Behaviors at Work, Professional Ethics and Human Values, Ethical Hacking, Organizational Behavior, etc., These courses instill a set of ethical norms and basic values necessary for the peaceful existence of the humanity. These courses also impart the standard for professional practice and recommends appropriate technologies and management patterns to make the professional and personal life to go hand in hand. Ethical practices such as not indulging in any malpractice, maintaining ragging free environment, etc., are ensured inside the premises to uphold morality and ethics.

Human Values:

Inter Personal Values, Professional Ethics and Human Values, Personal Values, Personal and Professional Ethics, Personality and Character Development, Essence of Indian Traditional Knowledge for Engineers, etc., are the courses incorporated in the curriculum to teach the students human values. The Institution offers yoga classes for the overall wellbeing of the students and to provide mental calmness and sharpen concentration. The clubs YRC, NSS, Road Safety and Sports that are functioning under the Personality and Character Development course and Blood Donation Camp which is organized periodically inculcate the significance of service to the society, team work and leadership.

Gender Equity:

The Institution fosters gender equity by providing equal opportunities for both the genders in terms of admission, training programs, co-curricular and extra-curricular activities. Organizational Behaviour, Executive Communication, Micro Finance

are the courses that deal with gender equity. The Institution also ensures parity for the women students and faculty members by designating them in various positions like Secretary, Joint Secretary and member in Department associations, clubs and in other various forums and encourages them to participate in women empowerment events. The Institution has constituted Women Development Cell and Anti Sexual Harassment Cell with a motive of promoting social respect, safety, self-dignity, rights and comfort for women inside the premises.

Environment and Sustainability:

The courses related to environmental studies such as Environmental Engineering, Energy conservation in buildings, Sustainable agriculture, Soil and Water Conservation Engineering, Human Engineering and Safety in Agriculture, Industrial Safety Engineering, Industrial Wastes Treatment and Disposal, etc., make students aware of the problems that are posing threat to the Environment. Open elective courses like Waste Management, Waste Water Treatment, Renewable Energy Technology, etc., enable the students to probe into the causes and remedial measures for varied pollutions, waste management methods and to keep track of the effects of human activities on environment.

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	View File
Any additional information	View File

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

20

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

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

937

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

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

1658

File Description	Documents
List of programmes and number of students undertaking field projects / internships / student projects	View File
Any additional information	View File

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	**A. All 4 of the above**

File Description	Documents
Provide the URL for stakeholders' feedback report	https://nandhaengg.org/curriculum-feedback/
Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management	View File
Any additional information	View File

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://nandhaengg.org/curriculum-feedback/
Any additional information	View File

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

634

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

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)

516

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

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.

Response:

Learning Level Assessment:

The college has a transparent mechanism to identify the learning levels of the students based on their academic performance. Student's learning levels are assessed by the Proctors and Academic Coordinators based on the performance in Continuous Assessment Tests and End Semester Examination results. To maximize

the skill based education and to enhance student's learning outcomes, the college provides pathways for learning opportunities.

Slow learners

Students are identified as slow learners and adequate support are provided to overcome academic difficulties by arranging video presentation, additional coaching classes and practice assignments.

Tutorial classes and remedial classes are arranged to facilitate slow learners. Periodic counseling sessions are arranged for the slow learners to give motivation to perform well. Students are motivated to talk in English in every class hour either by recapitulation or concluding what had been taught to them. Academic problems are addressed in tutorial classes, assignments are evaluated and suggestions are given for improvements.

Students those who failed in analytical subjects are identified, particularly in Mathematics, special coachingclasses are conducedduring week ends. Students are allowed to undergosummer track mode to reappear for the subjects in whom they failed in previous attempts.

Every year, Lateral entry students undergo Bridge course at the beginning of the third semester.

Parent teacher meeting is conducted periodically to interact with the parents of both the slow learners and good performers to measure and monitor their performance.

Fast learners

The institution encourages high performers to participate in competitions, Workshops, Association activities, Professional society activities, Co-curricular and Extracurricular activities.

The students are encouraged to participate in National and International level competitions, conferences and Seminars. Further students are motivated to exhibit their ideas as projects in various events like Project expo, Ideathon, Hackathon, etc.

Advanced learners are allowed to take additional courses by choosing Open Electives and Professional Electives from the second year of study. Besides, the students can study one credit courses offered by industry experts and Add on course during the week ends. By acquiring equal number of credits for a course the students are given exemption from studying a regular course that featured in the curriculum and encouraged to take up self-study electives in the seventh semester.

Choice Based Credit System (CBCS) is promoted in such a way that different open elective courses are offered by every department to other departments. This interdisciplinary of learning open elective courses by other department students will have learning awareness and job oriented benefits. CBCS permits students to select interdisciplinary courses according to their needs and provides flexibility and opportunity to earn extra credits.

Students those who are interested in learning additional language are allowed to study foreign languages as an elective course and credits earned after completing the course will be taken for course exemption.

Advanced learners are encouraged to undergo research attachment programme in abroad Universities during their final year of study and are allowed to do their internship at premier institutions, research organizations and leading industries.

Students with good academic excellence are encouraged to study online courses in NPTEL to acquire wide spectrum of knowledge in their domain area and to inculcate interest towards research.

Further, they are advised to publish their research work as articles in reputed peer reviewed/refereed journals. Guidance is provided to students to prepare for entrance and competitive examinations.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/2-2-1/

2.2.2 - Student – Teacher (full-time) ratio

Year	Number of Students	Number of Teachers
Nil	2819	225

File Description	Documents
Upload any additional information	View File

2.3 - Teaching- Learning Process

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

Student-centric teaching-learning process is adopted in Nandha Engineering College by keeping the student's need in forefront. It focuses on the instruction, which is shifted from the teacher to the students with the end goal of developing autonomous and independent students by placing the responsibility of learning in the hands of the students. Nandha Engineering College has applied student-centric learning to promote Outcome-Based Education (OBE) through experimental, participative, and problem-solving methodologies. Effective Teaching Learning Process is achieved through regular course delivery to attain and to improve COs, POs & PSOs used for different level of students.

EXPERIENTIAL LEARNING

1. PBL/RBL (Project Based Learning/Research Based Learning)

In the curriculum few core subjects are introduced as PBL/RBL (Project Based Learning/Research Based Learning) to inculcate project skills in the domain of study. Knowledge gained through the PBL/RBL helps the students to do collaborative projects. Active Learning methods like Industrial Seminar, Mini Projects, Group Projects and Group Discussion have been adopted and practiced in various levels in teaching and learning.

1. One Credit Courses

Skill-based courses in emerging areas are offered as One Credit Courses. They provide a platform for hands-on training to the students

in specific domain of their choice. These courses are handled by industry experts and faculty members.The main objectives of these

one credit courses are:

- To provide students an understanding of the expectations of industry.
- To improve employability skills of engineering students.
- To bridge the skill gaps and make the students industry ready.
- To provide an opportunity to develop inter-disciplinary skills.

1. Usage of open source tool and otherSoftware for effective Learning

Different pedagogical tools are provided to encourage students to take part in experimental learning through MOODLE, MOOC, Edmodo and Google Class Room. Open source tools such as Pycharm, Red hat Linux, Net beans. Faculty members are also uploading the study materials in intranet and other open source tools. To facilitate the use of these resources all the classrooms are equipped with LCD projector or LED TV screens and green/white boards. Open source tools usage provides students a good control over the computer resources. Also open course provides opportunity to students learn faster.

1. Summer Internship

An internship is the best way to apply the classroom knowledge into practice. Undergoing an internship, the students gain experience, learn new skills and add value for their career prospects. Students are encouraged to attend an internship program in their final semester to bridge the gap between the academic learning and the real-time industrial requirements.

1. Industry Visits

In NEC Industrial visit is a part of education through which students visit companies and get insight into the internal working environment of the company. Industrial visits are regularly arranged to enhance the practical knowledge of the students where they get an exposure to relate the theory with the processes adapted in the industry.

Guest Lectures, Seminar, Conference & Workshops

- As a part of academic development, Guest lectures, Career

Oriented Lectures, Seminar, Conference and workshops are arranged by all Departments Association throughout the year.

- Through the association, the students are encouraged to attend Seminars and present papers in other reputed institutions.

PARTICIPATIVE LEARNING

1. Professional Society

Students are motivated to get enrolled in professional societies like CSI, ISTE, IETE, and IEI etc. Promotion of creativity and critical thinking among the students is accomplished through these forums

1. Club Activities

The institute organizes various activities through Fine Arts club, Sports club, Photography club, Music club, Go-green club, Road safety club, National Service Scheme (NSS), National Cadet Corps (NCC), Youth Red Cross (YRC),Women Development Cell (WDC), etc., to inculcate moral and ethical principles in the students in turn to society.

1.

The students are motivated to participate in All India-Level Technical Events like Smart India Hackathon to showcase their innovative ideas. Smart India Hackathon is thecompetitive eventswhere a large number of people participate for collaborative computer programming and showcasing their coding skills.

PROBLEM SOLVING METHODOLOGY

- TamilNadu State Council for Science &Technology (TNSCST) funds our student

Projects that solve the problems of social relevance.

- Real time assignments and case studies enable the students to provide the solutions for real world problems.
- Students apply the theoretical Knowledge in Laboratory classes to solve specific problems.
- Case study methodology enhances students problem-solving

techniques.

- **Objective type questions in higher level of thinking are given as tutorials to focus on critical thinking**
- **Collaborative learning model is adopted to enhance problem solving skills Simulation tools and Virtual labs are effectively used to provide hands on experience to students in analytical/ Problem Solving approaches**

File Description	Documents
Upload any additional information	[View File](#)
Link for additional Information	https://nandhaengg.org/2-3-1/

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

Response

Faculty members in the institution use Information and Communication Technology (ICT) tools very effectively to enhance the teaching-learning process among the students by creating interest in live concepts.

ICT TOOLS

- **Projector**
- **Examly software**
- **Presentation Software**
- **Google Doc**
- **Google Form**
- **Blogs**

Infrastructure

- **Faculty members prepare the curriculum and specify the delivery technique as a part of the teaching-learning process before starting each semester. Theory courses are taught by using Power Point Slides, Videos and ICT tools to get visual effect for better understanding of the students.**
- **Laboratories, Classrooms, Seminar halls, Conference Rooms, Auditoriums, and Hostels are enabled with Wi-Fi internet facility with a bandwidth of 500 Mbps, which provides space for the students to learn from e-resources to update their skills.**

Digital Library

Nandha Engineering Central Library (NECL) is fully automated and specially designed to motivate the learning skills of students community. The library has a unique website in the name NECL.

- It has been designed with the free accessible online open sources like books, journals, magazines, Career and Skill development, Projects, Competitive Exam portals etc by providing links.

Examly

- Nandha Engineering College uses Examly Software that provides learning contents, practice exercises and assessments to teach programming courses for improving the programming skills of students.
- Examly Software provides unique learning path for each student and to adapt the practice exercises as per the understanding of the concepts.
- End Semester Practical Examinations for Programming Languages, Placement Training Tests and One mark Online Tests are conducted through Examly Software.

Google Classroom

- Classroom helps to streamline the process of sharing materials, assignments, boost collaboration, and to faster communication. Students use classroom with many tools such as Gmail, Google Docs, and Google Calendar.

NPTEL

Students are encouraged to enroll for NPTEL courses and acquire knowledge pertaining to the domain. Course exemption is offered depending upon the credits.

Moodle Server (LMS)

Online aptitude tests, unit wise online test for all the theory subjects and objective test for laboratory subjects are conducted.

Virtual Labs

Virtual labs are online simulation-based labs for various disciplines of Science and Engineering under the initiative of the

Ministry of Education. .

Youtube Video

Faculties have their separate BlogSpot, Google sites, and YouTube channel for their course and students can access them through social media and interact with other learners outside the institution.

Telegram Group

Telegram is particularly useful outside the online classroom toencourage additional practice and skills development.

E-resources

- The e-resources like DELNET, INFLIBNET, NLIST, NDLI, ShodhSindhu, ShodhGanga, etc. are used.

Web Links

The following links are provided for describing ICT enabled tools for effective teaching and learning process:

https://new.edmodo.com/groups/15cs701-principles-of-cloud-computing-304393390

Name of the e-content development content

https://www.youtube.com/watch?v=iPIOY1VqP-M

http://www.nandhaengg.org/images/cse/Ball_Game.pdf

Youtube Link

https://youtube.com/channel/UC7lLbSzZfIPqNWiuRFa38Mg

https://youtube.com/channel/UCxc3N_WO4vjYKqXObjtVoEQ

https://youtube.com/channel/UCMOXbLyDoiKbpxhAcxYaVxQ

https://youtube.com/channel/UClZeKuk4wwaZolVi7Uehi4A

File Description	Documents
Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process	https://nandhaengg.org/4-3-4-econtent/
Upload any additional information	View File

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

2.3.3.1 - Number of mentors

168

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

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

Academic Calendar

Academic calendar is prepared in discussion with the Principal, Controller of Examinations, Deans and Heads of the Departments. It is prepared well in advance for each semester of every academic year for all the years and it is circulated to the faculty members and students. A timeline for completing the syllabus and conducting the Internal and End Semester exams is suggested in the Academic Calendar. It provides adequate balance between academic and non-academic activities. It includes all important details such as commencement of classes, Parent teacher meetings schedule, Project review dates, assignment submission dates, Class committee meeting information, Academic Audit schedule, Submission of Continuous Assessment Test marks, Internal marks and Tentative date for End Semester Exam both theory and Practical, Public holidays, Festival breaks in addition to the College fests etc., Few activities are deviated due to unavoidable reasons like placement drives, declaration of holidays by the Government / Local authority.

Course Plan

Curriculum and Syllabi is developed in BoS meeting and the same is approved in Academic Council Meeting. The syllabus is designed to be completed in 45 to 60 periods. Before commencement of every Semester, Heads of the Department conducts a meeting with their faculty members to allocate the subject for both theory and laboratory. On the basis of academic calendar, time table and lesson plan are prepared. In the beginning of the semester, readiness team audit the course content such as lecture notes, study materials, PowerPoint presentations and laboratory for effective teaching. The subject handling faculty members prepare unit wise teaching plan, lecture notes and teaching aids for their respective subjects before commencement of the classes. If the number of regular working days is inadequate, holidays are transformed as working days. Syllabus coverage is discussed in class committee meeting and monitored by Course Coordinator, Academic coordinator, and Head of the Department.

Internal Quality Assurance Cell (IQAC)

IQAC calendar is prepared to enrich the quality and effective implementation of teaching learning process, Assessment, Research and Development activities, Placement activities Laboratory audit and Academic audit. IQAC regularly conducts meeting with all the Department Heads to maintain quality of academic teaching and learning process. Student projects (In-house/Industrial), Placement activities, funding proposal are audited by the various parameters in IQAC. IQAC periodically collect feedback from students, faculty members and Stake holders to take necessary actions for the improvement. Annual Quality Assurance Report (AQAR) provides systematic data with respect to various improvements to be taken up by the institution. The overall picture of the institutional growth in all the seven criteria of AQAR is prepared and submitted every year to NAAC.

File Description	Documents
Upload the Academic Calendar and Teaching Plans during the year	View File

2.4 - Teacher Profile and Quality

2.4.1 - Number of full-time teachers against sanctioned posts during the year

225

File Description	Documents
Year-wise full-time teachers and sanctioned posts for the year	View File
List of the faculty members authenticated by the Head of HEI	View File
Any additional information	View File

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

55

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

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

1583

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

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	View File
Any additional information	View File

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

0

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

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

Admission and Preprocessing

The students are admitted to the college through Tamilnadu Engineering admission system followed by the Government of Tamilnadu and by the Management. The admitted students list is approved by the Directorate of Technical Education. The approved list is used for the conduct of examinations. The student application forms are generated for the payment of examination fees. The attendance of the students is verified and only the eligible students are permitted to write examinations as per regulation. The hall tickets are issued to the students for appearing in the examinations.

Question Papers

The examiners selected for question paper setting must have a minimum of 5 years experience. The examiner list is scrutinized and approved by the respective Board of Studies. The list also placed in the academic council. The approved list is forwarded to the Controller of Examinations (CoE). The examiner for question paper setting list is sorted based on their qualifications and the subjects they have handled. The examiner is also instructed to follow Bloom's Taxonomy for setting the question paper. The question paper setting order is sent to the examiner through e-mail. The examiner has to type the question paper with the given template and send it to CoE through e-mail.

Prevaluation of Examination Papers

The lists of absent students are entered and the dummy number is generated. The dummy number is pasted in the answer papers. The student information part is separated and kept safely for later identification. The answer papers are shuffled and bundled for evaluation. The examiners for valuation are selected from the approved panel of examiners. The internal examiners are also selected for valuation. The appointment order is sent to the examiner through email after verifying the consent of the examiner. Prevaluation meeting is conducted to discuss about the diiiscrepancies in the question paper. The senior faculty is appointed as chief examiner for each board.

Valuation of Examination Papers

The answer key for question paper is prepared by the faculty handling the subject. The key is provided to the examiner. A tabulator will check the total of each paper and if the examiner missed to value an answer will be informed and the chief examiner will notify that to the examiner. The marks are entered into the system and the list is printed. The examiner and the chief examiner verify the total marks and affix their signature in the list.

Publication of Results

The pre result passing board meeting is conducted. The Heads of department go through the tabulated mark sheet, if any abnormality is reported. The result passing board meeting is convened to discuss the results.

Post Result Process

After the publications of the results, the students who are not satisfied by the result are permitted to apply for a copy of the examination papers. The photocopy of answer script is issued to the students to verify the valuation. With the recommendation of faculty, the student can apply for revaluation. The answer paper is revalued and compared with the first valuation by external examiner after that final decision is taken.

Impact of Reform

Single answer book system with serial number for each answer book. The serial number is to identify the paper if any issue in dummy number. The examiner enters the marks inside the paper to avoid non-valuation of answer. This system gives confidence of the

students in valuation and reduces for applying revaluation. The second examiner aware of the marks allotted by first examiner. Based on the answer key, the second examiner allots the mark. If a student is not satisfied with the revaluation, the student can apply to challenge valuation.

Processes integrating IT

- Introducing of master course from academic council data form syllabus.
- Registration of students for Regular courses.
- Generate examination application form.
- Record of question paper bank and Valuer by Head of the Department (HoD).
- Preparation of Continuous Assessment Test Time table
- Semester examination Question Paper setter and valuation entry by HoD
- Question Paper setting order sent by Controller of Examinations (CoE)
- Preparation of Examination Gallery report.
- Publication of Exam Time table through web portal.
- Examination seating arrangement in software and display for student view.
- Semester Exam Invigilation duty assignment and order printing
- Examination Valuation order mailed.
- Valuation mark entry and printing of Hardcopy of Grade sheet.
- Generation of valuation claim bill and sent through online.
- Result published in college website on the same day of Result Passing Board
- Applying for Revaluation and Retotalling.
- Revaluation result published in college website
- Award list is prepared and sent the same to University for issuing Provisional certificate and DegreeCertificate
- Printing of Grade sheet, Consolidated Mark sheet for issuing to students.

Continuous Internal Assessment System

1. Receiving Academic Calendar from Academic Dean.
2. Collecting the following details from all the departments at the time of each semester reopening

- Department wise faculty list, student namelist, time table, furniture details, classroom details
- CAT circular, subject order, seating arrangements and duty chart.
- Verifying CAT questions to ensure blooms taxonomy level and SelectionofquestionpapereithertheTypeAorTypeBbyexamcellcoord inatorformaking Xerox before three hours from the commencement of CAT exams.
- Monitoring CAT exam is done by Squad members and Consolidation of Squad Report is forwarded the same squad report to the Principal.
- Ensuring the process throughout the Academic year.
- At the end of each semester, the exam cell supports to enter the internal marks in COE protal.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	https://nandhaengg.org/wp-content/uploads/2022/03/2.5.3_NEC_ADDL-1.pdf

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

The institution is implementing Outcome Based Education (OBE) by following the guidelines of the National Board of Accreditation (NBA). In OBE, the Programme Educational Objectives (PEOs), Programme Specific Outcomes (PSO), Program Outcomes of each department are prepared and used to measure the outcomes, based on the Graduate Attributes (GAs).

The learning effectiveness of any program and course depends on the POs and Course Outcomes (COs). The PEO, PSO and PO are displayed at various prime locations in the institute premises and is also available on the website to make faculty members and students aware about the PO, PSO and PEO. In order to make students aware about Course Outcomes (COs), the department had mentioned COs in the syllabus of the respective courses.

The Program Outcomes, Program Specific Outcomes are helpful in developing the framework of teaching and learning. The Course outcomes facilitate in clear understanding about the course expectations and also support the process of learning. The Course

outcomes also present a clear picture of employability, skill development and entrepreneurship prospects of the course. Further the outcomes help to understand the various cross cutting issues pertaining to gender, environment, values and professional ethics. Board of Studies of all the departments and the Academic council approves the curriculum which appropriately incorporates Program Outcomes (POs), Program Specific Outcomes (PSOs) and measurable Course Outcomes (COs) for all programs offered by the institution. While framing the syllabus the scope, methodology and outcomes are also taken into consideration.

Process of Dissemination:

- College Website — www.nandhaengg.org

- Dissemination to the internal stakeholders

Displayed in all prominent places of department such as HoDs chamber, Department notice board, Faculty rooms, Classrooms, Library, Hostel, Laboratories and Newsletters.

- Communicated to students before starting of the course.
- Dissemination is ensured by proctors during the proctor meeting.

- Dissemination to the external stakeholders

Discussed in BoS meeting, Parents meeting, included in the funding agency sponsored Seminar/Workshop proposal brochures, and Alumni meet.

File Description	Documents
Upload COs for all courses (exemplars from the Glossary)	View File
Upload any additional information	View File
Link for additional Information	https://nandhaengg.org/wp-content/uploads/2022/03/2.6.1_NEC_ADDL.pdf

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

CO Assessment Processes:

Design of curriculum was carried out during the years 2013, 2015

and 2017 to meet the evolutionary requirements in the industry and business sectors in compliance with the Program Outcomes(POs) and Program Specific Outcomes(PSOs) in line with the recommendations of Program Assessment Committee through Department Advisory Board and Board of Studies.

- To identify the extent of compliance of the curriculum for attaining the POs and PSOs different processes or methods are adopted through direct and indirect assessment methods.

- Direct assessment is done by processes of analyzing performance of students by

- Continuous Assessment Test (CAT)
- Assignment
- Online Test
- End Semester Examinations(ESE)
- Project evaluation

- Indirect assessment is done by conducting

- Alumni survey
- Employer survey
- Student exit survey
- Course end survey

The course coordinators periodically monitors the attainment levels of Course Outcomes (COs), POs and PSOs. Target levels of attainment of COs are set by the course handling faculty members in discussion with the course coordinator during the course coordinator meeting. Attainment of COs is determined and the loop is closed either by increasing the target level for the next offering of the course or by planning suitable improvements in the teaching /learning process to increase the actual attainment so as to reach the target. The Evaluation of attainment of POs and PSOs is based on the mappings from COs to POs and PSOs. The academic programmes offered by the institution have clearly stated Program Educational Objectives (PEOs), Mission and Vision. The correlation of POs with PEOs and the Mission statements were also defined and it is integrated with institute Vision and Mission.

The attainment levels of the COs, POs and PSOs are very important parameters for the OBE system. This helps in creating an academic environment for achieving excellence. The efficiency and effectiveness of the process is continuously monitored, assessed and improved by taking inputs from the

discussion/suggestion/decision taken in the meetings of the Department.

Assessment of COs for Theory and Laboratory courses:

The Assessment of COs for Theory courses are based on

- CAT
- Assignments
- Online Tests
- ESE

Laboratory courses' outcomes are evaluated based on

- Continuous Monitoring of regular Laboratory Classes,
- Model Examination.
- .ESE

Direct Attainment Calculation:

Direct Attainment for Theory= 0.6* ESE + 0.3*CAT + 0.05*Assignment + 0.05*Online test

Direct Attainment for Laboratory= 0.5*ESE + 0.5*(CAT+Model)

Overall Attainment = 80% of Direct Attainment + 20% of Indirect Attainment

PO & PSO attainment = (Overall COx Attainment)* ((Mapping value of PO and PSO for CO x)/ 3) where, x is the number of COs

Likewise the attainment for all the courses is calculated and the Direct attainment level of a PO/PSO is determined by taking average across all courses addressing that PO/PSO. The Indirect attainment level of a PO/PSO is determined based on the student exit survey, employer survey and alumni survey. Finally the average of Direct and Indirect attainment states the Attainment of a PO/PSO.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	https://nandhaengg.org/2-6-student-performance-and-learning-outcomes/

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

828

File Description	Documents
Upload list of Programmes and number of students appear for and passed in the final year examinations	View File
Upload any additional information	View File
Paste link for the annual report	https://nandhaengg.org/wp-content/uploads/2022/03/2.6.3_NEC_AADL.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://nandhaengg.org/wp-content/uploads/2022/04/SSS-2020-2021.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 professional institution has framed a strong research policy to promote research interest and innovations in the emerging areas of Science, Engineering, and Technology to support a research culture among faculty members and research scholars to undertake interdisciplinary research. The excellence of research work directly translates to the excellence of teaching and learning in the classroom, benefiting students, society, and our country. The research activities encourage the academic programme by enriching the knowledge of the faculties in their field of expertise. The strength of the research initiatives is that they confirm to established norms and standards for the safe and ethical conduct of research. The well-defined research policy has been approved and uploaded on the college website.

R & D Cell:

Our institute has constituted research committee by Principal with the Director and all the Heads and Deans are nominated as Research Composition Committee members to monitor research activities. The R & D Cell keeps a constant check on the calls for proposals and encourages faculty members to submit proposals to government and non-government funding agencies. Research proposals must go through a multi-tiered review process that includes the research and development committee and the research ethical committee. This may be followed by a review by eminent experts from the advisory board of the R & D council. The proposal is then examined by the R & D committee before submission to the funding agency.

Research Laboratories:

The institution has been 3 research centres offering Ph.D programmes in different disciplines they are Computer Science and Engineering (CSE), Electronics and Communication Engineering (ECE) and Mechanical Engineering (Mech). The institution has received research funds to set up laboratories Fuel Cell Research Lab and Nano Research Lab, under the scheme of AICTE AQIS RPS and constructed Cloud Base Virtual Computing for Open Source Software Teaching and Research Laboratory under the scheme of AICTE-MODROB. The Institution has linked MoUs with industries such as Fermion Energy and Engineering Solutions (P) Ltd., SIM Info Systems (P) Ltd., Prime Industries, Imarticus Learnings, Maven Silicon Softech Private Limited, Vi Microsystems (P) Ltd., Srisairam Infotech, Escorts Training & Development Centre, TMI Systems, ICT Academy, BSNL, Roots Industries, Campus Connect Infosys etc. to promote a multidisciplinary research culture.

Library:

The institution maintains a highly stacked library for research reference. The digital library has 200 IEEE access, 2952 JGate, and 235 DELNET Pro-quest online journals, 8820 e-books, 31,535 Audio Visual courses, and 9202 Conference Proceedings with back volumes. There are 2895 e-Books and 842 e-Journals and e-Magazines on CDs, DVDs, and VCDs along with free accessible online open sources like books, journals, magazines, career and skill development, projects, scholarships, competitive exam portals etc. by providing links.

The Institution has conducted various webinars, workshops, and

FDPs to promote research in the areas of patents, improving research visibility, etc. During the tenure 2016-2021, the Institute has 60 doctorates, among them 14 are research guides and 32 research scholars are pursuing their doctoral research.

File Description	Documents
Upload the Minutes of the Governing Council/ Syndicate/Board of Management related to research promotion policy adoption	View File
Provide URL of policy document on promotion of research uploaded on the website	https://nandhaengg.org/research-activities/
Any additional information	View File

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)

1.7

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

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

26

File Description	Documents
e-copies of the award letters of the teachers	View File
List of teachers and details of their international fellowship(s)	View File
Any additional information	View File

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)

16.745

File Description	Documents
e-copies of the grant award letters for research projects sponsored by non-governmental agencies/organizations	View File
List of projects and grant details	View File
Any additional information	View File

3.2.2 - Number of teachers having research projects during the year

2

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://nandhaengg.org/research-activities/
List of research projects during the year	View File

3.2.3 - Number of teachers recognised as research guides

1

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

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

1

File Description	Documents
Supporting document from Funding Agencies	View File
Paste link to funding agencies' website	https://nandhaengg.org/research-activities/
Any additional information	View File

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.

Centre for Innovation and Product Development (CiPD)

CiPD was established in Nandha Engineering College in the year 2014 with the aim of creating spark of innovation in the students' mind and to expose them to the existing problems that need to be solved. It encourages the students to come up with ideas which have innovation, Intellectual Property Right (IPR) component and potential commercial value. It connects the students with experts for mentoring. Project making, project exhibition& presentation, hackathon and participation in competitions are part of our yearly event (Innovation Day) schedule. The CiPDplays a vital role in inviting innovators, researchers, successful startups/entrepreneurs from varied fields to share their experience for problem solving and success scenarios which may benefit students/faculty members of the Institution. Further, the centre aims to build an interdisciplinary networks and teams for students and facilitate understanding of subtle aspects of innovation, IPR, startups and entrepreneurship.

Business Incubator:

Business Incubator @ Nandha Engineering College was established in the year 2016 and received Host Institution (HI) status from MSME, Government of India in the year 2018. So far, 10 products have been launched; benefitting various sectors of society. The MSME under "Support for Entrepreneurial and ManagerialDevelopment of SMEs through Incubators scheme" had sanctioned Rs.15 lakhs to Nandha BI andsupported innovators to convert their ideas into prototypes / products.

Institution's Innovation Council (IIC):

Institution's Innovation Council at Nandha Engineering College was started in the year 2018 to create an ecosystem for supporting young minds towards innovation and entrepreneurship. The major focuses of IIC are (1) to encourage the creative energy of student population to work on new ideas and innovation and promote them to develop products, (2) to develop better cognitive ability for Engineering/technology students and to create complete ecosystem which will inculcate the culture of Innovation, (2) to conduct various innovative and entrepreneurship-related activities prescribed by MIC in time bound fashion, (3) to identify and reward innovations and share success stories.(4) to organize periodic workshops/ seminars/ interactions with innovators / startups / entrepreneurs, professionals and create a mentor pool for students' innovations, (5) to network with peers and national entrepreneurship development organizations.

Entrepreneur Development Centre (EDC):

Entrepreneurship Development Cell of Nandha Engineering college was established in the year 2013 with the objective of enhancing entrepreneurship awareness among the student communities. The Cell has been organizing various entrepreneurial promotional programs to transform students into entrepreneurs once they complete their graduation besides creating entrepreneurial awareness among them with funding supports from agencies like DST-NIMAT, Department of Science and Technology(DST), Ahmedabad, etc.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/wp-content/uploads/2022/03/3.3.1_NEC_ADDL.pdf

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	View File
List of workshops/seminars conducted during the year	View File
Any additional information	View File

3.4 - Research Publications and Awards

3.4.1 - The Institution ensures implementation 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	A. All of the above

File Description	Documents
Code of Ethics for Research, Research Advisory Committee and Ethics Committee constitution and list of members of these committees, software used for plagiarism check	View File
Any additional information	View File

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

17

File Description	Documents
URL to the research page on HEI website	https://nandhaengg.org/research-activities/
List of PhD scholars and details like name of the guide, title of thesis, and year of registration	View File
Any additional information	View File

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

0.28

File Description	Documents
List of research papers by title, author, department, and year of publication	View File
Any additional information	View File

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

0.54

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/wp-content/uploads/2022/03/3.4.4.nec_additional-information-1.pdf

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

245

File Description	Documents
Any additional information	View File
Bibliometrics of the publications during the year	View File

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

20

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

3.5 - Consultancy

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

6.125

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

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

22.86726

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

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 Nandha Engineering College organizes several extension activities to uplift the institute-neighborhood community to sensitise the students towards community needs. Extension programmes like NSS, Youth Red Cross, Rotaract Club, Tree Plantation Club, and Road Safety Club have been made an integral part of the curriculum to encourage students to participate in community building processes. Social outreach programmes like awareness rallies, Blood donation camps and cleaning activity programmes are organized to sensitize various sections of the society on Institutional Social Responsibility. Through its diverse community-oriented programmes and activities focused on the holistic development of students, with community.

National Service Scheme (NSS):

The National Service Scheme of Nandha Engineering College has undertaken several extension activities for the benefit of society. NSS organizes a seven-day residential camp in nearby villages and addresses the significance of social issues, which include cleanliness, tree plantation, environmental awareness, national integrity, plastic awareness programme, blood donation camp, health check-up camp, and voter awareness Programme etc. Such activities pave the way to developing volunteers' leadership, patriotism, discipline, character building, spirit of adventure and the ideal of self-service.

Rotaract club:

Our institution encourages student participation in community service through various campaigns and programmes through the Rotaract club. Programmes for planting saplings, visiting old age homes and orphanages were also organized. Camps and awareness programmes like blood donation camps, clean India activities and dengue awareness programmes were arranged outside and inside the campus. Through this, students utilize their knowledge, andthey can acquire leadership qualities and democratic attitudes and develop the capacity and skills to meet emergencies.

Personality and Character Development:

Our college is aware of the responsibility to mould students into responsible citizens by involving them through various programmes. The institution has vibrant clubs such as Green Club, Organic Forming Club, Tree Plantation Club, Trekking Club, Road Safety Club, and Youth Red Cross, which have been made an integral part of the curriculum to encourage students to participate in community building processes. Students can learn about social responsibility by participating in these clubs.

Innovation Day and Career Guidance Programme:

Every year, we host an innovation day to exhibit the various projects and share their ideas with the public and school students. This initiative promotes innovative ideas among school students.Our institution organizes social outreach programmes for school students, such as career guidance programmes, talent shows, and awareness programmes for higher studies. Through these programs, students can determine the best major for their interests and goals by guiding them through self-assessments and making them explore what they will need in the future.

All of the above activities have a positive impact on the students, and they help to improve student community relationships, leadership skills, and self-confidence. It also helped in the development of students' hidden personalities and raised student awareness. The college encourages students to participate in a well-developed neighborhood network where they can gain service-oriented training.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://nandhaengg.org/personality-and-character-development/

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

6

File Description	Documents
Number of awards for extension activities in during the year	[View File](#)
e-copy of the award letters	[View File](#)
Any additional information	[View File](#)

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)

11

File Description	Documents
Reports of the events organized	[View File](#)
Any additional information	[View File](#)

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

692

File Description	Documents
Reports of the events	[View File](#)
Any additional information	[View File](#)

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

264

File Description	Documents
Copies of documents highlighting collaboration	View File
Any additional information	View File

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)

9

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

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.

Nandha Engineering College (NEC) covers a boundary of 25 acres and is well connected to the state highways, with a 4,43,234 sq. ft area of built up structures with all essential amenities. All the classrooms (63 Nos) are equipped with LCD/LED Projectors/Smart TVs, Personal Computers, and Wired/Wireless Internet connectivity. Among 63 classrooms, 51 are for UnderGraduate (UG) programmes and 12 are for PostGraduate (PG) programmes. The Infrastructure includes 4 drawing halls of 4300 sq.ft, 3 Seminar halls of 2680 sq.ft and an Auditorium of 5655 sq.ft spanning across 9 blocks. NEC is equipped with 58 laboratories for various disciplines with state of the art facilities. Industry Sponsored laboratories in collaboration with the leading industries and funding agencies have been established in the frontier area of Engineering and Technology. All the laboratories are provided with adequate periodically calibrated equipment to give practical exposure to

the students. Besides equipment, the laboratories are supported with First-Aid boxes and each block has fire extinguishers to ensure the safety of the students.

Classrooms, Drawing Halls and Seminar Halls

The Institution has 63 classrooms with LCD/LED Projectors connected with Wi-Fi. Each classroom has spacious seating capacity based on sanctioned intake (minimum 18 and maximum 72). Four Drawing Halls, based on the requirements of the curriculum, are available. Institution has three Seminar halls and two Conference halls for conducting Department/ Institute level programs such as association activities and programs related to the professional bodies of the department.

Institution also follows University norms with respect to laboratory curriculum, viz., experiments, details of equipment and other infrastructure requirements including department offices, exam cell and strong room. The above provisions are continuously inspected by Anna University before granting affiliation. There are a total of 58 laboratories in the campus. The college has a central library that occupies the prime place in the heart of the college to accommodate more than hundred students. Central Library is equipped with an adequate number of titles and volumes of text and reference books and is available for students and faculty members.

Digitized Library

Nandha Central Library is a three-storey building of 10,800 sq.ft intended to accommodate upto 250 students with adequate seating facilities. It has 61,555 Volumes, 19,263 Titles, 96 International Journals, 102 National Journals in addition to 77 Technical Magazines and 32 General Magazines. The Library has 13 different memberships and access to 8,820 e-books and 3,324 e-journals. NEC has enabled the Digital Library for viewing of e-content from NPTEL / SWAYAM portal and has also provided with a reprographic facility available on the first floor.

The Library also has 30 computers which are networked and connected with the internet. Provisions are also made to the students such that the laptops can be connected inside the library with LAN/Wi-fi to access the internet. In addition, each department also has its own Department Library for the benefit of the students and faculty members.

Computing Facilities

A total number of 1,163 computers, 72 printers and 10 scanners are available throughout the campus for students' usage. The computers are networked labwise using CAT 5E and CAT 6 cables and Labs are interconnected using multi paired Fiber optics. The Network Topology is being facilitated with hybrid bus architecture with proper laying. Available bandwidth of internet connection in NEC is 1 Gbps which is connected with firewall secured 25 Wi-Fi connectivity access points.

Learning Management System

Google Classrooms are created for every class and learning materials are shared using the portal. Internal Assessment components such as assignments, quizzes, tutorials are conducted here. Study materials and Online video lectures for each subject are posted in the Google Classroom which would help the students in learning. Such materials can be viewed by the students during their study time. Online tutorials, Quizzes and Assignments are also being conducted using Google Classroom. Computing Labs are conducted in a specialized AI powered learning and assessment tool named as EXAMLY (www.examly.io).

Smart Nandha

The Institute has designed Smart Nandha, an online intra campus management system, that supports faculty and students for booking function halls, downloading various forms, providing periodical feedback, addressing grievances,etc.,

Other Infrastructure

The College has Principal Room (352 sq.ft), Individual HOD Cabins (231 sq.ft), department wise Faculty Rooms (286 sq.ft), Controller of Examination Office (2300 sq.ft), Reception (858 sq.ft), Exam Cell (1482 sq.ft), Dining Hall (4800 sq.ft), Hostel (38724 sq.ft) and Cafeteria (3100 sq.ft). Added, NEC has a Training & Placement office, Technology Business Incubator (TBI) and Yoga Hall.

A video recording room with equipment such as DVR, Smart TV, and noise cancelling mics is available to assist professors in conducting online classes . Provisions are also available for recording video lectures and uploading them to various learning management systems. Further, the college ties up with PALS in

establishing a virtual lab namely Process Modelling and Simulation Lab for the Chemical Engineering Students.

The Institution establishes Industry Supported Labs by signing MoUs with industries. Microprocessor Lab receives Rs. 2 Lakh worth sponsor from Microsystem Pvt Ltd, Chennai and selected students are trained by Virtusa in proprietary technologies of industries such as Tech-Ops and Dev- Ops.

The College's Centre for Innovation in Product Development (CiPD), which has a built-up space of 2,448 square feet, helps students turn their ideas into products. Each department's project laboratories provide students with the chance to receive hands-on experience with state-of-the-art facilities, allowing them to become adept at both physical and creative talents.

The college has a robust transport system with a fleet of 40 buses operating from our campus. They facilitate ease of conveyance for both students and staff. The buses ply to and from the prominent parts inside the Erode city and its sub-urban areas. College buses are available to Tirupur, Avinashi, Tiruchengode and Sankari covering a distance of 85 Kms radius. For Field visits and Industrial visits also college provides buses for required departments as and when required.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://nandhaengg.org/wp-content/uploads/2022/03/4.1.1-Index-New.pdf

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

Sports Activities

With a firm belief that physical fitness leads to mental fitness, the college provides first-rate facilities on play fields for various games like Volleyball, Football, Cricket, Badminton, Hockey, Chess, Caroms etc., in the campus. The College conducts Annual Sports Meet and encourages students to participate in the Inter-Collegiate events. In addition to team games, individuals have excelled in College and University level sports and in Athletic events.

Department of Physical Education

The Physical Education Department has all the facilities to promote sports and games among the students. The total area of the playground is more than 10 acres. State level and District level tournaments are periodically held on the campus.

Facilities

Volleyball

3 Courts

Cricket

1 Ground

Cricket Nets

2

Football

1 field

Hockey

1 field

Kabaddi

2 Courts

Badminton

4 Courts

Table Tennis

3

Carrom, Chess

10

Basketball Court

1

Track & Field

400mts/6 lanes

Indoor Auditorium

The auditorium in Nandha Engineering College is based on the plan of pliability of usage. The auditorium is located inside the college premises at the backside of Block 5 in a spanning area of 24,000 sq.ft.The auditorium is a large multi use hall with provisions for numerous sports like Shuttle, Badminton, Indoor Volleyball, Indoor Basketball, Table Tennis, Carom, Chess, etc to be played. The auditorium, with its state-of-the-art facilities, affords an integrated sports facility that will cater to everything; from day-to-day training of athletes to hosting state and national events. In addition, the indoor auditorium provides space for organizing academic seminars, conferences, workshops, Annual Day, etc., The multipurpose indoor auditorium is also supplemented with allied service areas like VIP lounges, green rooms, changing rooms, media boxes, etc.

Yoga

Yoga is a holistic practice that helps to gain overall balance and focus. Most students experience an increase in strength and flexibility, decrease in stress level and tension in the muscles, and a feeling of mental clarity and peace.

A spacious hall is maintained for doing Meditation and Asanas in a lush green, peaceful environment. The yoga center "Temple of Consciousness" was inaugurated by Padma Shri SKM. Maeilanandhan. The College, with the aid of Erode Manavalakalai Mandram Trust, offers yoga classes for all the students and staff members. Trained full time yoga teachers are available to teach yoga.

Open Air Theater

The institute comprises two open air theaters with a seating capacity of 2,500 and 1,200 respectively to organize events like Graduation Day, Prize Distribution, etc.,

ATM

Nandha Engineering College has a well maintained and well managed

24x7 ATM facility within its campus, facilitating the students and staff members to perform all the required transactions safely. Above all, Hostel students are able to use the ATM at any time within the campus premises. Indian Bank strategically positioned the ATM near the main gate of the College to focus on basic bank transactions through the ATM. Further, the college ATM is under 24X7 CCTV surveillance to guarantee the safety of the students.

Gymnasium

Inculcating a hale and hearty relationship with fitness for personal well - being is imperative for every individual and more so with college students. Nandha Engineering College, apart from providing scholastic education, takes responsibility for the mental and physical welfare of the students. By keeping this in forefront, the gym in Nandha Engineering College resonates with a sound mind in a sound body. The significance of the gym is, it is in-door and stretches across a large area. The boys' gym consists of Weight lifting and Powerlifting sets like 32 Disc Plates under various kilograms, 36 Dumbbell rods under varied weight categories. In addition, the gym has Rods and Hammer Rods of different feet and Small Handles Push Down (V) Rod, Push Down (W) Rod, (D) Handle, Push Down Ropes, Hanging Bag (ABS), Lat Pull Down(pipe) and Seated Rowing (pipe). The gym equipment is well examined and maintained in accordance with high standards. This in-door unit is separate for boy and girl users. Regularly, more than 100 students are availing the gym facilities.

Medical Facilities

Tie-ups have been established between the Institute and Nandha Medical College Hospital, as well as between the Institute and Krishna Medical Center, Perundurai to provide emergency medical treatment to NEC students.Nandha Medical College Hospital's ambulance services are also utilised by Nandha Engineering College to transport students for treatment.

File Description	Documents
Geotagged pictures	View File
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/wp-content/uploads/2022/03/index-4.1.2.pdf

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

63

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

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

60.58

File Description	Documents
Upload audited utilization statements	View File
Details of Expenditure, excluding salary, during the years	View File
Any additional information	View File

4.2 - Library as a Learning Resource

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

Library is automated using Integrated Library Management System (ILMS)

Nandha Engineering Central Library (NECL) is fully automated and specially designed to motivate the learning experience of faculty members and students community. It functions in a three- storey building with an area of 1080 square feet. The Library has a collection of books around 61,144 volumes and 19,040 titles. For the periodical section, the Library subscribes to 198 International and National print journals, as well as 77 Technical Magazines and six daily newspapers (English papers alone).

The air-conditioned digital library is implemented with 32 desktop systems and 20 Laptop usable desks for accessing 200 IEEE, 2952 JGate, 130 ProQuest online journals, 8820 e-books, 31,535 Audio Visual courses and 9202 Conference Proceedings with back volumes.

These can be accessed inside the campus on 24/7 basis via Wi-Fi and also through remote access by using User name and Password for IEEE and J-Gate. There are 3005 e-Books, 852 e- Journals and e-Magazines as CDs, DVDs and VCDs. It also includes more than 292 NPTEL courses for teaching and learning purposes.

Name of the Software – Campes – i Lib : The Digital Librarian

Nature of automation – Fully Automated with Barcode tag

Version – 7.0.2

Year of automation – 2006

The software is an integrated multi user package which can be accessed by the library users. It has the facility to take reports like

? · Statistics of Acquisition

? · Transaction

? · Periodicals

? · Book reservation

? · Members dues

? · Entry register

? · Best users

? · Transactors

The users can avail Online Reservation, Daily News Clippings, Members' individual record and they can search for CDs, VCDs and Back volumes through Online Public Access Catalogue (OPAC).

A 50 inch TV is installed along with Doordarshan dish to telecast 32 educational channels launched by Swayam Prabha to support Massive Open Online Course (MOOC) facility in the Periodical Section.

The library has a unique website which has been designed with the help of free accessible online open sources like books, journals, magazines, career and skill development, projects, scholarships,

competitive exam portals etc. by providing links. A Whatsapp broadcast group has been created for faculty members to deliver new arrivals, news clippings (articles, educational reports, other college news etc), e-books, etc.,

The library has 20 years digitized question papers that are being sent to faculty members and the student community as per the request through email. The library has procured unavailable and rare books by using membership with Developing Library Network (DELNET).

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://nandhaengg.org/4-2-1/

4.2.2 - Institution has access to the following: e-journals e-ShodhSindhu Shodhganga Membership e-books Databases Remote access to e-resources | A. Any 4 or more of the above |

File Description	Documents
Details of subscriptions like e-journals, e-books, e-ShodhSindhu, Shodhganga membership	[View File](#)
Upload any additional information	[View File](#)

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

21.04

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

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

790

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

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 Institution has designed its own maintenance policy procedure that includes several methods to achieve the effective maintenance of physical, academic and other facilities.

Methods

Effective maintenance is being achieved by using the following methods.

1. Reformation site

2. Class Committee Meetings

3. Periodical visits by the supervisors concerned

4. WhatsApp group

MAINTENANCE SECTION

A centralized maintenance section, headed by a maintenance manager and supported by skilled technicians such as electricians, plumbers, carpenters and masons is in practice. This section takes care of the maintenance of infrastructural facilities that include plumbing, electrical, carpentry, masonry and sewage works. The section receives maintenance requirements from the departments and other sections and undertakes the necessary work following internal operating procedures under the directions given by the supervisors concerned, without disturbing the regular activities.

INTERNAL OPERATING PROCEDURE:

Any problem that persists in a department is represented through the below mentioned methods.

? · The complaints are posted in college reformation site

? The supervisor/ skilled person/technician is summoned to rectify the problem

? The technician resolves the problem on site if no additional material is required.

? In case of material requirements, the materials are received from the maintenance section

after the approval of the store manager.

? · If the material is to be procured from outside, permission is to be obtained from the maintenance coordinator / administrative officer and arrangements are made for procurement of the material to resolve the problem.

? The completed work is inspected by the supervisors concerned and the status of work completion is updated in the reformation site.

1. Physical Facilities

Electrical Maintenance:

· Monthly monitoring of electrical equipment such as Generator, UPS, and Batteries is done and its status is entered in the maintenance register. The suppliers/service providers are approached in case of any major fault.

· In case of any damage spots in the electrical equipment, quotations are invited and the part is procured as per the purchase procedure.

· The work done by the service provider is verified by the respective authorities and a report on the completion of work is submitted to the maintenance officer.

· Required support is obtained from external agencies and TNEB whenever required.

Building Maintenance:

· An approver third party civil engineer and his team are responsible for new construction works and the maintenance of buildings, including laying, painting, plumbing, and sanitary fittings following the campus protocols.

Furniture Maintenance:

· Periodically, monitoring of furniture such as chairs, tables, windows, and doors is done on a regular basis, and the status is entered in the register. In the event of any damage or replacement noted on the reformation site, the suppliers/service providers are approached to rectify it at regular intervals.

Network / Wi-Fi Maintenance:

· Functioning of the college intranet and internet facility is monitored and maintained by the

hardware technicians in association with system administrators of the college.

· Any upgrades or modification to the existing network model is carried out by inviting quotations from external agencies following guidelines from the CSE department.

2. Academic Facilities:

Library:

? Damaged books are collected by the librarian for hard binding on a regular basis.

? Rare and High volume books are maintained in the reference section.

? Journals and Magazines subscribed annually are bound as a book volume.

? The entire library is cleaned weekly.

? Book shelf rectification is performed every semester by using the book call number

? The library's digital section systems are formatted and

maintained every semester.

Laboratories:

? Equipment in the laboratories is maintained and calibrated periodically.

? In-house maintenance and repairs are addressed by the respective qualified and trained department technicians.

? Major problems and repairs are addressed in consultation with the suppliers following the advice of the HoD concerned and the Principal.

? Computers and software in the laboratories are maintained by computer hardware technicians under the supervision of system administrators.

Classrooms:

? Every Department has a furniture incharge who periodically checks the condition of classrooms and laboratory amenities like benches, chairs, black boards, fans, lights, and electronic equipment.

? The incharge resolves the problem through the Head of the Department following the procedure.

3. Supporting Facilities:

Sports:

Athletic field tracks are refilled once in every five year and playgrounds such as volleyball, cricket, Handball, Koko, Kabaddi, and Throwball fields are filled on an annual basis by the skilled manpower under the supervision of the Physical Director.

Sporting equipment is purchased according to the lifetime of the material by the Physical Director.

4.Transport Facilities:

? Minor damage/ repairs in the buses are rectified using the skilled manpower inside the campus under the supervision of the Transport Manager.

? Major damage/ repairs in the buses are rectified by the skilled third-party service team tied up with the institution.

? An adequate number of spare buses are available in the 10:1 ratio of the buses that can be used in case of bus breakdown.

? An adequate number of drivers are available for all the buses. Additional drivers are also available in the 10:1 ratio for buses to alter the bus drivers in case of driver's medical emergency/ personal leave.

? Every year, all the buses are sent to the RTO office to check the fitness of the buses and the Fitness certificate of all the buses is maintained properly.

? A Speed limiter of 60km speed is fixed on all the buses.

5. Other Facilities:

? The Institute has an RO plant that provides 24X7 drinking water facility. Sufficient number of water points are available in the departments to provide clean drinking water. Periodically, the quality of water is tested by external vendors.

? Adequate manpower is employed to maintain the cleanliness of the campus, classrooms, staff rooms, seminar halls and laboratories, etc. The washrooms and restrooms are well maintained.

? The green cover of the campus is well maintained by full time gardeners.

? Surveillance Cameras are fixed in and around the Campus for security purposes and they are maintained by the system administrators.

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	https://nandhaengg.org/4-3-1/

4.3.2 - Student - Computer ratio

Number of Students	Number of Computers
2819	**926**

File Description	Documents
Upload any additional information	[View File](#)

4.3.3 - Bandwidth of internet connection in the Institution and the number of students on campus

A. ?50 Mbps

File Description	Documents
Details of bandwidth available in the Institution	[View File](#)
Upload any additional information	[View File](#)

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

A. All four of the above

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://nandhaengg.org/4-3-4-econtent/
List of facilities for e-content development (Data Template)	[View File](#)

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)

98.28

File Description	Documents
Audited statements of accounts	View File
Upload any additional information	View File

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 Institution has designed its own maintenance policy procedure that includes several methods to achieve the effective maintenance of physical, academic and other facilities.

Methods

Effective maintenance is being achieved by using the following methods.

1. Reformation site

2. Class Committee Meetings

3. Periodical visits by the supervisors concerned

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? Surveillance Cameras are fixed in and around the Campus for security purposes and they are maintained by the system administrators.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://nandhaengg.org/system-and-procedure-for-maintaining-and-utilizing-physical-academic-and-support-facilities/

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

1766

File Description	Documents
Upload self-attested letters with the list of students receiving scholarships	View File
Upload any additional information	View File

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

1005

File Description	Documents
Upload any additional information	View File
Institutional data in prescribed format	View File

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	A. All of the above

File Description	Documents
Link to Institutional website	https://nandhaengg.org/capacity-development-and-skills-enhancement/
Details of capability development and schemes	View File
Any additional information	View File

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

2063

File Description	Documents
Any additional information	View File
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)	View File

5.1.5 - The institution adopts the following mechanism for redressal of students' grievances, including sexual harassment and ragging: Implementation of guidelines of statutory/regulatory bodies Creating awareness and implementation of policies with zero tolerance Mechanism for submission of online/offline students' grievances Timely redressal of grievances through appropriate committees

A. All of the above

File Description	Documents
Minutes of the meetings of students' grievance redressal committee, prevention of sexual harassment committee and Anti-ragging committee	View File
Details of student grievances including sexual harassment and ragging cases	View File
Upload any additional information	View File

5.2 - Student Progression

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

413

File Description	Documents
Self-attested list of students placed	View File
Upload any additional information	View File

5.2.2 - Number of outgoing students progressing to higher education

37

File Description	Documents
Upload supporting data for students/alumni	View File
Details of students who went for higher education	View File
Any additional information	View File

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

36

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

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

7

File Description	Documents
e-copies of award letters and certificates	View File
Any additional information	View File

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

Students Association:

Each department has its own association besides that professional bodies like CSI, ICT, IE, IEEE, IETE, IIChE, ISOI, ISTE, IWCS and SAE to accomplish students' technical abilities. The Secretary,

Joint Secretary, Treasurers, and Executive members are elected by the student members to carry out the association activities. Experts reputed institutions and leading industries have been invited to deliver academic and industrial seminars, workshops, and career guidance programs for placement and higher education to remain updated with emerging technologies and bridge the gap between industry and institute.

Class Committee:

The Class Committee Meeting (CCM) provides a place for students to discuss their issues related to teaching – learning process as well as amenities. The meeting will be held twice a semester and will include the Convener, Chairperson, and a maximum of eight students (a mix of boys and girls, day scholars, hostellers, academic toppers, and fast and slow learners) who will represent the entire class. The complaints will be sent to departments for correction to the relevant department, they will be resolved, and the action being taken will be updated in the reformation portal.

Women Development Cell:

Women Development Cell has both the faculty and students of the College as its members and works with an aim to create a gender sensitized community. It has been organizing varied health awareness programs for the upliftment of girl students and disseminating the real importance of gender equality in society. In the interest of WDC, International Women's Day is celebrated every year inviting famous personalities and orators as Chief Guests. As a part of the celebration, Women achievers of various fields are identified and honored with Kalki Award.

Clubs:

Various clubs are formed by the institution for extra-curricular, cultural and social activities for the betterment of the students. The club activities are offered for all the students as mandatory but non-credit course "Personality and Character Development" from first semester to fourth semester in their curriculum. The students in Cultural, Fine arts, Music and Photography the clubs are involved in various activities to build character, leadership and management qualities. Many social awareness programs are conducted through NSS, YRC, Tree plantation and Road Safety clubs where they learn to coordinate with the team to complete the work. Sports club provides opportunity to play like Cricket, Football, Basketball, Volleyball and other indoor games which help in

maintaining mental and physical fitness. Trekking is an adventure sport; it encourages students to become more self-reliant. Fine arts club brings out the cultural talents in the students every year through the cultural event "Rhythm".

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/personality-and-character-development/

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

17

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

Nandha Engineering College (Autonomous) is an esteemed and well-respected self-financing higher educational Institution that aims to achieve excellence in Engineering education with a strong emphasis on equipping rural students. NEC Alumni have prestigious positions across the world. The Institution maintains a close relationship with its former students.

Nandha Alumni Association has been registered as "Nandha Poriyiyal Kalluri Munnaal Maanavargal Sangam" (Sl. No. : 100 / 2014) dated on 4th December 2014. It is envisioned and formed as a lifetime platform for the welfare of the Nandha student Community. This global platform will not only facilitate effective and faster communication among the alumni members but also provide an opportunity to "Learn, Leap and Lead" throughout their life.

Nandha Alumni Associationwebsite designed by Vaave, enriching Alumni relationships. NEC Alumni in all over the world who have enrolled in the college Vaave web portal. Vaave Alumni Portal assists in bringing the alumni community together on a shared platform in order to provide members with a new channel of personal and professional support through 'self help' within the community. "My Alumni Network" is the Mobile App powered by Vaave that allows Alumni, Students, Faculty members and Stakeholders to access the institution's official alumni network on Mobile.

NEC Alumni Association coordinates and supports alumni activities:

- To promote the Institution's Teaching – Learning process, soft skill of the student, Industry interface, placement / internship, research and outreach programmes.
- To facilitate communication with alumni and to strengthen bonds of fellowship, professional association and institutional affiliation.

- To encourage alumni to stay connected in attaining the missions and goals of their respective departments and ensure their talent and financial resources to the Institution's improvement.

Reunion:

Reunion interaction helps to be aware of new opportunities in placement and other fields in every year. It plays a vital role to develop students in recent technology. The Institution conducted Silver Jubilee Reunion during November 2018.

Mentorship Programs:

Alumni Connect – To interact with Students on Career Guidance.

Objectives:

- **Prepare the next generation Leaders and Entrepreneurs.**
- **Provide motivation and mentorship to guide in career path options.**
- **Create a support system which can be used beyond college days for career development, work life integration, etc.**

Benefits:

- **Develop leadership skills in potentials.**
- **Students can get exposure to recent trends in Industry.**
- **Establish a sustainable framework between Colleges, Alumni & Students.**

Participation of Alumni in Academic and Industrial Interaction:

- **Member in Board of Studies, Academic Council, Governing Body and Project evaluation.**
- **Resource person for one credit / Two credit courses, Seminar, Symposium, Conference and Workshop.**

Number of Alumni Association / Chapters meetings held during the last five years:

2020-21

2019-2020

2018-19

2017-18

2016-17

2

2

3

2

2

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://nandhaengg.org/alumni-at-nec/

5.4.2 - Alumni's financial contribution during the year	**E. <2 Lakhs**

File Description	Documents
Upload any additional information	View File

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

Vision: To be a world class Engineering and Management Institution in leading technological and socio-economic development of the country by enhancing the global competitiveness of technical manpower and by ensuring high quality technical education through dissemination of knowledge, insights and intellectual contributions. Mission: To provide value-based technical education and mould the character of younger generation. Nature of Governance: Nandha Engineering College, as a self-financing reputed autonomous institution, strictly adheres to UGC autonomous guidelines since 2012. All the autonomous process is decentralized, democratic and transparent. The Principal and the Chairman of Governing Council plan the activities for the year and forwards the same to the departments for implementation supported with adequate finance and infrastructure. Initiating new programs, start of new research centres, introduction of academic reforms (Choice Based Credit System, Relative Grading), implementation of e-governance and submission of SAR for several accreditation processes are a few such endeavours. To introduce CBCS in the curriculum number of meetings is held among several functional heads to implement CBCS for all UG and PG programmes. The progress is monitored and actions are made based on the feedback from students, employers, parents and other quality assurance processes. Every employee has an opportunity to contribute his/her innovative ideas leading to give higher quality results. This is achieved through the committees operating at strategic levels of

management. Governing Council (GC) monitors and evaluates all the activities in accordance with UGC guidelines, the Academic Council and other statutory committees. The GC ensures that all decisions on admission, budget, infrastructure, teaching-learning process, and placements are in line with the Institute's vision, mission, and quality policy. The GC meets once in a year to assess performance and actively contributes to the organization's growth. Institute Quality Assurance Cell (IQAC): All the activities are done through the Institute Quality Assurance Cell (IQAC). The IQAC is led by the Principal, the Chairman of IQAC and consists of three senior administrative officers, one nominee from the local society, two members from management, one nominee from employers/industrialists/stakeholders, Page 85/122 30-03-2022 03:36:54 Self Study Report of NANDHA ENGINEERING COLLEGE (AUTONOMOUS) Industry Expert, IQAC Coordinator, all HODs, two senior faculty members, and a placement officer. The objective of IQAC is to build a structure for making deliberate action to progress the institution's academic and administrative performance. Statutory and Non- statutory Committees: Several statutory and other committees are in place to manage various activities related to academic, administrative, and extension programmes in addition to the Governing Council. To promote sustainable socio-economic development through global competitiveness, the Institute places a value on the social impact and responsibility of its research and development. The functions of non-statutory committee are planning evaluation, academics, placement, student centric activities, co-curricular and extra-curricular activities and Industry Institute Partnership. Finance Committee: The Finance Committee provides financial analysis, advice, and oversight of the organizations budget. The sole responsibility of the committee is to ensure the financial resources and also scrutinizes the budget submitted by the different departments and monitors the utilization of department budget. The committee also proposes the budget for the financial year of departments and institute.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	https://nandhaengg.org/wp-content/uploads/2022/03/6.1.1-NEC-ADDL.pdf

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

Decentralization:

Management encourages faculty members by including them in the statutory bodies such as Governing Council, Academic Council, Finance Committee, Board of Studies, Disciplinary Committee, Anti Ragging Committee, etc. Heads of the department are responsible for the academic and administrative matters of concern department. The head of the department allot the workload with the respective faculty based on their area of specialization. All academic activities are planned by faculty members at department level in line with college goals.

Participative management:

Management conducts periodical review meetings to discuss about the department activities related to students and faculty. Students' performance related to Enrolment Ratio, Academic performance, Graduateoutcome, Career guidance, Training and Placement, Industry visit, In-plant training, Internship and sports achievements are discussed and the plans are discussed in the meeting. Faculty activities like Teaching Learning process, Development/Training programs, publication, copyright, patent are monitored in that review meetings. Department activites include Singing MoU, Stakeholder visit, planning and implementation of Strategic plan and events organised are established to train the faculty and students to enhance their skills in recent trends and techniques. Best performing departments are highly appreciated. Faculties and students are encouraged to do online MOOC courses in the reputed forums like NPTEL, GUVI, HACKER RANK, HACKER EARTH, Infosys Spring Board, TCS ion, Udemy. Institution concentrate very much on establishing various centre of excellence and industry supported laboratories for developing learners skillset. Class committee meeting minutes and action taken reports are discussed in the review meeting. All the issues relevant to the academic, infrastructure, transport, canteen and other resources are faced out with the help of class committee meeting.

Institutional practices:

The Value Added Course (VAC) is initiated to the students to meet the gap between the Industry needs and Institutions Curriculum. Syllabus for VAC is suggested by industry employees to faculty members in par with the current IT trends for the benefits of the students. Totally 30 hours are allotted for one credit. The feedbacks are received from students through class committee

meetings, from employees, alumni and industry people. Assessment is done by course conducting industry person and grades are provided with certificates. Various club activities namely Cultural & Fine Arts Club, Social Club and Sports club are implemented under Personality and Character Development course for the overall development of the students.

Academic and Research:

The college adapts Outcome Based Education (OBE) from the academic year 2015-16 onwards. It results in changes in regulations, inclusion of open elective system, blending of theory with practice through embedded courses, besides introducing, add/drop course options for the students enabling them to study the courses well in advance and provides opportunity to pursue internships in the final semesters. Considering the dynamic transformation of higher education in terms of expansion, enrolment, quality and access, NEC would like to position itself in the top100 Engineering Institutions at National level. To accomplish the same, the institution follows strategies in Governance, Teaching-Learning process, Quality and Ranking, R&D, faculty development, Student care and Stakeholder participation.

File Description	Documents
Upload strategic plan and deployment documents on the website	View File
Upload any additional information	View File
Paste link for additional Information	https://nandhaengg.org/wp-content/uploads/2022/03/Stratgeic-Plan-2016-2026.pdf

6.2 - Strategy Development and Deployment

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

Strategic planning and evaluation committee: Nandha Engineering College, as a self-financing reputed autonomous institution, framed strategic plan for five years (2016-2021) for the improvement of the institution. The strategic planning is a guiding document for the upcoming five years to assess and improve the institution towards delivering quality education there by earning due recognition. The main focus of strategic plan is on good governance, best in class teaching learning, research &

innovation and preparing employable students who act as brand ambassadors for the institution. Based on Institution's Vision & Mission, the strategic goals and strategies are formed with action plans. The strategic planning committee is constituted by the Principal of the Institute. In strategic planning committee meeting the following discussions are carried out to enhance the quality education. STRATEGIC PLAN Planning Cycle: 2016 -2021 (5 years) Goals and Objectives: GLOBAL COMPETITIVENESS Strengthening of research publications Establishing Centre of Excellence (CoE) Revenue generation through consultancy works. Improving research activities by leveraging the grant-in-aid of external funding agencies Quality improvement through accreditation Introducing new programs HIGH QUALITY TECHNICAL EDUCATION Active involvement of faculty in industry interaction: FINE (Faculty Industry Education) Promoting culture of innovation, idea incubation and establishing Business Incubator Creating awareness about IPR for faculty and student members Encouraging filing of IPRs (Patent & Copyright Efficient teaching erudition procedures Academic planning and preparation of academic calender Preparation of lesson plan based on CO and PO mapping Conduct training based on current demand analysis Constant assessment to measure outcomes provide mentoring and individual support Follow a transparent feedback system Implementation of best practices for studentsEffective Governance To review the smooth running of the administrative activities of the college, discussing approval of new programs To review the examinations results(internal as well as external of all programmes, result analysis and their improvement strategies To approve upgradation and maintanence and infrastruture of the institution To establish E- governance Establishing internal audit committee Institute industry interaction cell Industrial research and consultancy Short term training programs Collaborative Educational Programmes Participation of industrial experts in curriculum design Student internships and industrial visit Providing carrier guidance Constant growth in research and innovation Fund generation through project proposal Apply for government/non-government industry, sponsored funds Collaborations with government and private institutes, universities and research organisations Centres for Excellence as Tool for Capacity Building of an Educational institution: Nandha Engineering College has joined hands with IT company to establish the centres for excellence in the institution and enhance the business knowledge for the student society. Three in-house companies namely IGEN services & solution, Thulliam InfoTech Private limited, Entuple technologies Private limited, Virtusa are established inside the college premises for the better understanding of business culture. Centre for excellence offers training to the students from II year

onwards. Students are selected on the basis of their academic performance. Our institution introduces new emerging subjects that are not included in our curriculum as value added course such as CVAC so that students can complete this competitive world

File Description	Documents
Strategic Plan and deployment documents on the website	View File
Paste link for additional information	https://nandhaengg.org/about-us-2/
Upload any additional information	View File

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.

Organization Structure:

Nandha Engineering College is a self-financing Autonomous Institution under the Nandha Educational Trust. The Managing Body of the Trust and the Governing Council play an important role in academic decision-making, administration, and the overall growth of the institution. The institute's organizational structure clearly defines the guidelines of the institution's organogram. The secretary and correspondent are the highest authority in the organization. IQAC team plays a vital role to escalate and implement the decision making and develops the projects suggested by the Secretary and Correspondent. Governing Council The Governing Council is the highest governing body of the college, and it is the final decision-making body in all matters. A meeting of the college's Governing Council is held once a year. Several issues pertaining to various academic and administrative matters are discussed and debated in the governing Council, and an appropriate decision is reached while keeping student development as the primary focus of its deliberations and decisions. The Governing Council strongly believes that students should achieve their desired outcomes and as a result, makes all necessary efforts (including the use of appropriate educational methods such as outcome-based education, infrastructure, equipment, and tools) to create a student-centric environment. It adheres to the guidelines established by apex bodies such as the University Grants Commission, the AICTE, and the Anna Univeristy in Chennai, and does so with utmost sincerity. The Governing Council monitors the strategic plan on a continuous basis and provides appropriate advice and direction to the administration for the implementation

and development. Appointment and service rules College ensures that the selection process for direct recruitment for various post carried out annually to maintain required faculty members. The selection committee prepares the job description and a job profile for the candidate to be hired. The committee members shortlist the candidates through screening test, classroom demonstration and interview. The committee shortlisted the candidates and submit their recommendation along with candidates profile to the principal and chairman. The eligibility of the appointment is based on AICT norms and appointment letter is offered by the chairman Statutory and Non- statutory Committees: Various activities related to academic, administrative, and extension programmes in addition to the Governing Council administer by the various statutory and other committees. As a result, the Governance of the college is more participatory, with the governing Council serving as its leader. This makes all student stakeholders to experience academic growth and career development. To contribute and promote sustainable socio-economic development through global competitiveness, the Institute places a high value on the social impact and responsibility of its research and development activities. Institute level committees

Governng body

Academic council

Board of studies

Finance committee I

QAC and NIRF

Planning and Monitoring

Grievance redressal

Admission Committee

Research and development

Academic audit

Women Development Cell

Anti ragging Committee and squad

Program Assesment Committee

Traning and Placement cell

Oline courses

Entrepreneurship Development

Student Welfare Committee

Sexual Harassment Committee

File Description	Documents
Paste link to Organogram on the institution webpage	https://nandhaengg.org/wp-content/uploads/2022/03/Organizational-Chart.pdf
Upload any additional information	View File
Paste link for additional Information	https://nandhaengg.org/hr-policy-3/

6.2.3 - Implementation of e-governance in areas of operation: Administration Finance and Accounts Student Admission and Support Examination	**A. All of the above**

File Description	Documents
ERP (Enterprise Resource Planning) Documen	View File
Screen shots of user interfaces	View File
Details of implementation of e-governance in areas of operation	View File
Any additional information	View File

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

- **Faculty is encouraged to attend conferences / workshops / Faculty Development Programmes and training programmes every**

year.

- Sponsorships to attend training programmes and present papers in conferences.
- To enhance the faculty skill set several Faculty development programs (FDP) are also organized.
- Internet and free Wi-Fi facilities are available in campus for staff.

General Facilities

- The institution has sports, gym, and yoga facilities; the campus has ATMs.

Leave Benefits

Type of leave / On Duty

Teaching

Non-Teaching

Casual Leave (CL)

12 Days / year

12 Days / year

Medical Leave (ML)

10 Days / year for hospitalization

(Above 3 years service)

10 Days / year for hospitalization

(Above 3 years service)

Maternity Leave (MAL)

3 Months with half pay (3 to 5 Years service)

3 Months with half pay (3 to 5 Years service)

3 Months with Full pay (Above 5 Years service)

3 Months with Full pay (Above 5 Years

service)

Vacation (V)

Winter - 2 Weeks Summer – 2 Weeks

Winter - 1 Week Summer – 1 Week

On Duty (OD)

12 Days / year (Not limited)

12 Days / year (Not limited)

Higher Study OD

6 days / Semester

6 days / Semester

Permissions

1. Total two permissions / late attendance (up to 15 minutes in the morning) for all teaching, academic support and administration staff for coming one hour late or leaving one hour early will be permitted in a month.

Other Benefits

1. Group Insurance
2. Emergency advance for Medical Treatment
3. Sponsorship for Higher Studies – Ph.D. Full Time / Part Time, PDF
4. Sponsorship to attend Seminar / Paper presentation / Conference – in India & Abroad
5. Sponsorship to attend quality improvement and faculty development programme
6. Revenue sharing by staff in consultancy / testing (60:40 and 40:60)
7. Free Lodging facility to staff members who are staying in hostels

8. **Bank Loan facility at concessional interest rates through the Indian Bank**
9. **School fee concession in Nandha Schools.**
10. **Free transportation**

To enhance the employee profile, the institution provides various welfare schemes through the assistance of Indian Bank, which offers credit options to college employees such as personal loans, educational loans, housing loans, vehicle loans, and employee provident fund schemes.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/wp-content/uploads/2022/03/6.3.1_NEC_ADDL.pdf

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

56

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

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

36

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

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.)

203

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

6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

Internal Auditing Procedure :

The internal audit is conducted twice a year by third party, to ensure the accuracy of bills and vouchers. The internal auditor thoroughly verifies the income and expenditure details. During the process of auditing, initially, the audit team meticulously examines the income of the institute which includes collection of tuition fees, hostel fees, bus fees, exam fees, placement fees, consultancy fees, seminar and project grant, alumni fees and other miscellaneous charges. Further, the audit team ensures the bills and vouchers of the recurring and non-recurring expenses which include infrastructure, furniture, laboratory equipment, software, laboratory consumables, library, sports, R&D, maintenance and spares, training and travelling, salary for teaching and non-teaching faculty, function expenses, autonomous and affiliation expenses and other miscellaneous expenses. The compliance report of internal audit is submitted to the management of the institution through Principal. If any discrepancy is found, the same is brought to the notice of the Principal to resdue it. The

same process is followed in every financial year. A legal audit is usually performed at the end of every year. The management team examines the audit report. The accounts department audits and approves the disbursement statements before they are submitted to the Principal. The college is responsible in ensuring smooth conduct of the audit.

External Auditing Procedure :

The Chartered Accountant plays a vital role in auditing the accounts of the college as per the government norms. The auditor ensures that all payments are duly authorized after the audit and the report is sent to the management for review. Any queries, in the process of audit would be attended immediately along with the supporting documents within the prescribed time limits. Finally, the audit statement and balance sheet will be prepared by the chartered accountant for the institute to provide transparency at all levels. The institution had not come across with any major audit objection during the preceding years. All these mechanisms exhibit the transparency being maintained in financial matters and adherence to financial discipline to avoid misuse deduction of funds or properties of the institution at all levels. The audited statement is duly signed by the authorities of the management and chartered accountant.

File Description	Documents
Upload any additional information	View File
Paste link for additional information	https://nandhaengg.org/6-4-1/

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)

0.2

File Description	Documents
Annual statements of accounts	View File
Details of funds / grants received from non-government bodies, individuals, philanthropists during the year	View File
Any additional information	View File

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

Mobilisation of Funds:

The Institution is poised to grow and make its mark in global scenario by providing requisite funds and optimal use of resources. Financial resources are mobilized by fee collected from the students. Apart from this, the institute also generates funds from projects sponsored by government agencies and consultancy services. The Institute also receives grants from AICTE, UGC, CSIR, DST, NCW, ICMR, etc., to organize Seminars, FDP, etc. The fund is also mobilised through the alumni, who also provide financial and non-financial support for various activities in the institute and also by leasing out the infrastructure facilities to various commercial utility services. In addition to this, placement fee, bus fee, book fee, exam fee, hostel fee and other miscellaneous charges are generated. These generated funds are used to support the society and for the students through research and laboratory development.

Optimal utilisation of funds:

A constructive financial resource monitoring is done through the following procedures.

Before the commencement of every financial year, all the heads of the department instruct the concerned in-charges to provide the budget required for the upcoming academic year. The in-charges concerned provide both recurring and non-recurring expenses which include infrastructure, furniture, laboratory equipment, software, laboratory consumables, library, sports, R&D, maintenance and spares, training and travelling, salary for teaching and non-teaching faculty, function expenses, autonomous and affiliation expenses and other miscellaneous expenses. The Head of the Institution submits a budget proposal that incorporates the above recommendations of all department heads within the Institution, to the management after getting approval from the finance committee of an organisation.

The finance committee plays a vital role in presenting meticulous report of income and spending information. It also serves as an advisory team, which would offer efficacious suggestions to the Governing Body to use the funds with discretion. The Finance Committee meets at least once in a year and it ensures the ratification of the budget utilization of previous financial year and simultaneously approves the budget proposal for the next

financial year. The minutes of the meeting is prepared immediately by finance committee chairman and it is submitted to the governing body for further approval. Finally, the fund is allocated for utilization by the Governing body.

The allotted funds are effectively utilized for up-gradation of lab facilities in various departments and to renovate classrooms, labs and faculty rooms. The adequate funds are also utilized for the development and maintenance of infrastructure of the Institution and also to enhance the facilities of library to augment learning practices. Funds are optimised for student's amenities which include student's projects, internship, and extra-curricular activities. The allocated funds are utilized properly as per the academic requirements. Sufficient funds are allocated for effective teaching-learning practices that include Induction and Orientation Programs, Workshops, Inter-disciplinary activities, Training programs, Faculty Development Programs, Conferences and industry-academia interactions. The main motto of resource mobilization and optimal utilization of resources is to set Nandha Engineering College, a bench mark, in tune with quality teaching and unique growth of students.

Additional Information : Budget Plan

Additional Information : Finance Committee

Additional Information : Audit Statement

File Description	Documents
Upload any additional information	View File
Paste link for additional Information	https://nandhaengg.org/6-4-3/

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)

IQAC

The IQAC is led by the Principal, the Chairman of IQAC and consists of the following members: Director, IQAC Coordinator, all

HODs, team of Senior Faculty Members, and a Placement officer. The IQAC will hold a meeting every Tuesday with all the Heads of the Department. The main objective of IQAC is to develop a system for conscious, consistent and catalytic action to improve the academic and administrative performance of the institution.

Post Accreditation Improvements

The following are the accomplishment/academic development wherein the IQAC laid its stamp of excellence practice: The Institution becomes autonomous in the year 2013 and a choice-based credit system is established. Outcome-Based Education is administered as per AICTE-NBA. The college has received NBA Accreditation under Tier-I in the year (2021-2024) for 3 UG programs: CSE, IT & ECE in (cycle-IV); in the year (2016-2019) CSE & ECE (cycle-III), CIVIL (Cycle-I).

Improvements during 5 years:

3 New programmes and 3 Research centres are initiated after procuring NBA accreditation under Tier-I. New courses like AI, Biomedical, Agriculture and Chemical Engineering are offered. Faculty retention ratio, Publications and Publications with annexure are increased. Recognised Research Supervisors can be seen. Also in-house labs are established.

Accreditation Quality initiatives:

Strategies for the improvisation includes

- Research sharing and networking with other institutions in India and Abroad.
- Plan to offer new programmes, as per AICTE norms.
- Improvement in Centre of Excellence.
- Placement payscale above 10 lacs.
- Industry oriented curriculum.
- MoU with Premier Institutions and Industries.

Academic Improvements

Some of the significant academic achievements includes

- Received external grants as follows:
- Number of teachers having research projects during the last

five years – 16
- Number of departments having Research projects funded by government and non-government agencies during the last five years – 11
- Total Grants from Government and non-governmental agencies for research projects , endowments, Chairs in the institution during the last five years (INR in Lakhs) – 49.75646 (INR in Lakhs)
- Number of teachers recognised as research guides - 53
  - In 2016-17 (8 Projects) – ISTE, NABARD, IETE, EVI, ISRO, National Human Rights Commission, DST-SERB.
  - 2017-18 (15 Projects) – TNSCST, ICMR, AICTE-FDP, AICTE-RPS, CSIR, AICTE-PMKVY, National Human Rights Commission, National Commission for Women.
  - 2018-19 (18 Projects) TNSCST, AICTE-GOC, AICTE-FDP, AICTE-STTP, ISRO, CSIR, AICTE-PMKVY T1, IETE, EDI, National Human Rights Commission.
  - 2019-20 (12 Projects) – EDI, TNSCST, NCW, AICTE-RPS, AICTE-MODROV, AICTE-RPS, AICTE-STTP, DST SERB, AICTE-GOC, TNSGST.
  - 2020-21 (2 Projects) – TNSCST, AICTE AQIS RPS.
- Doctorate faculty members
- Technical papers published in reputed national and international journals - 225
- 80% of campus placements in all academic years.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional information	https://nandhaengg.org/6-5-1/

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

Committees for Quality Improvement:

Syllabus is an abstract or programme of knowledge. The Calibre of teaching can be procured only by means of interpreting the syllabus. Periodical modification of curriculum enriches the pedagogy. This process is monitored on continual basis by Institutional Quality Assurance Cell (IQAC) through Programme Assessment Committee (PAC) and Department Advisory Board (DAB). Academic audits are periodically done for course file. Course Outcome, attainment process are reviewed recurrently. All Course

Co-ordinators conduct 3 meetings, each semester for the analysis of course standard by comparing the results and teaching methodologies with previous outputs. The results get reflected in the Semester attainment. In addition, the IQAC also initiates essential steps to measure the quality of education through regular and continuous follow-up actions. The role and responsibilities of the IQAC committee are the same as defined by the NAAC.

Choice Based Credit System

The institution follows Choice Based Credit System (CBCS) and adopted the AICTE model Curriculum of 160 credits since 2018-19. The curriculum was designed by the faculty of the College following a lot of brainstorm sessions involving various stake holders including the current students undergoing the programme. The students were given more lab/practice-based courses. To expose the students to global learning methods and learn the human skills to reflect upon societal needs, few new courses (four credits) such as universal Human Values and Indian Constitution were introduced in the curriculum. All the suggested changes in the curriculum by the departments and their BOS are put forth to the academic council for approval.

Identification of Slow Learners and Fast learners

After CAT1, the students are divided into two categories, Category-I (fast learners) and Category-II (slow learners). For enhancing the academic performance, remedial coaching and counselling for the slow learning students and project-based alternate assessment for the fast learning students is being carried-out. This helps the students to upgrade their knowledge levels. This process of continuous assessment has resulted in the students to learn and reflect on the learning that they do in the classroom. At the end of the semester, the students undergo the End semester Examination (ESE) which results in awarding the SGPA based on their performance in each examination.

File Description	Documents
Upload any additional information	[View File]()
Paste link for additional information	https://nandhaengg.org/6-5-2/

6.5.3 - Quality assurance initiatives of the

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	https://nandhaengg.org/6-5-3/
Upload e-copies of accreditations and certification	View File
Upload details of quality assurance initiatives of the institution	View File
Upload any additional information	View File

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

7.1.1: Measures initiated by the Institution for the Promotion of gender equity during the last five years

Introduction:

Nandha Engineering College dedicates itself in organizing various programs and events such as seminars, debates, group discussions and awareness campaigns at regular intervals in order to deal with issues pertaining to the relationship between men and women, struggles with discrimination, sexual harassment, new forums for justice and to spread awareness about gender equity.

Activities:

In Nandha Engineering College, for the welfare of girl students and female faculty members, Women Development Cell was established in the year 2012. The Cell accentuates the general well being of the girl students, teaching and non teaching women staff of Nandha Engineering College. WDC conducts various awareness programmes

which support physical and mental health as well as to create social awareness about the problems of women in general and gender discrimination in particular by means of Health Awareness Programmes, Legal Rights Programmes and Webinars. These programmes help to identify Women Welfare Laws in order to inculcate self reliance among girl students.

Mechanical department of Nandha Engineering College, along with National Commission for Women (AICTE) conducted a program that focused on the study of gender equality, women empowerment and existing laws relating to women. WDC joins hand with NGOs functioning in and around the area to encourage the development of women through various programmes.

Awards and Recognitions:

International Women's day is being celebrated every year with the presence of chief guests from various fields like medicine, agriculture, advocate etc., The Women Achievers are being specially awarded with KALKI AWARD on International Women's day every year. As a part of the celebration various games and events are being conducted.

Fees Concessions are provided to the girl students those who are willing to join in core programmes like mechanical and Civil.

Counseling and Mentoring:

Apart from that, a Counsellor has been appointed by the college for assessing the regular activities of the girls and to identify their problems and help them to settle down their issues. Periodically, Counselling has also been given to all women faculty members mainly in the aspect of academic, career and behavioural patterns. Parents and tutors are timely informed before and after the counselling and the same reports will be handed over by the counsellor to the parents at the earliest. Protective and secure rooms have been allocated to ensure good health and hygiene of the students. Well furnished rooms with necessary facilities with separate cots and pillows, mirror, chair, table, wash basin, dustbin, etc., To reduce the burden of women employees and to take care of their wards, child care system has been implemented in association with a nearby play school.

Safety and Security:

Surveillance cameras are installed in prominent of the campus for

monitoring student's movements inside the college. The security personal is deployed across the college premises for any kind of security issues and offers strict vigilance. Usage of Helmets is mandatory for two wheel riders to enter and exit the campus. The anti ragging committee regularly monitors at scheduled timing in different places to make the campus free from ragging.

File Description	Documents
Upload any additional information	[View File](#)
Paste link for additional Information	https://nandhaengg.org/7-1-1/

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

File Description	Documents
Geotagged Photographs	[View File](#)
Any other relevant information	[View File](#)

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)

7.1.3Waste Management - Degradable and Non-Degradable Waste

Preamble:

The college is very keen in minimizing the waste and recycling it by passing through the scientific ways that enable the used materials to be recycled ensuring that less natural resources are used. Waste generated in the campus is segregated as solid waste, liquid waste and e-waste and taking the social clubs have played a prominent role in this by organizing various awareness programs, conducting tree plantations and various other activities.In our campus the following initiatives are taken towards the management of wastes. They are as follows:

Solid Waste Management:

For the collection of regular solid waste, garbage bins are kept

at different places in the campus. Biodegradable organic wastes such as dry leaves, yard trimmings, and waste from kitchen are subjected to the composting process. To convert these wastes into soil additives, a Vermicompost pit has been constructed on a relatively small scale of 9x3x3 feet near Crop and Animal Husbandry Laboratory. The organic manure thus obtained is used for cultivation.

Liquid Waste Management:

Sewage Treatment Plant with the purification capacity of 2, 00,000 litres per day has been installed near Boys Hostel for treating the liquid waste which is being collected from college, hostel and food court. Nearly 1, 84,000 litres of water is discharged from the plant after purification. The recycled water is used mainly for gardening.

E-waste Management:

Electronic goods are put to optimum use; the minor repairs are done by the laboratory assistants but the major repairs are handled by the technical Assistant and are reused. The waste compact discs and other disposable non-hazardous items are used by students for decoration during college fests as creative means of showcasing the waste management practice.

The Computer maintenance team identifies the e-waste that is accumulated in all departments on a regular basis and stores them in a specified place. The collected e-waste is sold to the proper agency for recycling.

Bio medical Waste management:

In the department of bio medical engineering, used needles and sharps are destroyed using an electrical device called Sharps and Needle destroyer.

Yellow bins are placed at several points inside the campus to collect used mask and other Bio waste materials.

Water Recycling System:

Recycled water acts as an alternate for existing water supplies and be used to enhance water security, sustainability and resilience. Recycling water can be a significant part of an Institutional pollution prevention program.

Waste water from boy's hostel and mess is recycled in the waste water recycling plant and used for gardening, irrigation purposes and watering lawn. This reduces usage of fresh water supply. It has been designed with the inflow of 2 Lakhs litre per 24 hours and stock capacity of 1.80Lakhs litre and outflow capacity of 1.60 Lakhs litre per 24 hours.

Handling of Hazardous Chemicals and radioactive wastes

Policies are framed to manage the hazardous chemicals in chemical laboratories. Students and faculty members are instructed to use chemicals by following the standing operating procedures like handling chemical with face mask and gloves etc.,

File Description	Documents
Relevant documents like agreements/MoUs with Government and other approved agencies	View File
Geotagged photographs of the facilities	View File
Any other relevant information	View File

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	View File
Any other relevant information	View File

7.1.5 - Green campus initiatives include

7.1.5.1 - The institutional initiatives for greening the campus are as follows:

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	View File
Various policy documents / decisions circulated for implementation	View File
Any other relevant documents	View File

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:

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	View File
Certification by the auditing agency	View File
Certificates of the awards received	View File
Any other relevant information	View File

7.1.7 - The Institution has a disabled-friendly and barrier-free environment: Ramps/lifts for easy access to classrooms and centres Disabled-friendly washrooms Signage including tactile path lights, display boards and signposts Assistive technology and facilities for persons with disabilities:

accessible website, screen-reading software, mechanized equipment, etc. Provision for enquiry and information: Human assistance, reader, scribe, soft copies of reading materials, screen reading, etc.

File Description	Documents
Geotagged photographs / videos of facilities	View File
Policy documents and brochures on the support to be provided	View File
Details of the software procured for providing assistance	View File
Any other relevant information	View File

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).

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

Initiatives for cultural and regionaldiversity

The Institution provides an inclusive environment for everyone by advocatingtolerance and harmony towards cultural, regional, linguistic, communal socioeconomic and other diversities. Various activities like Annual day, Women's day, Unity day, Science day, Yoga, etc are organized to promote an inclusive environment. Further Socioeconomic awareness programs like Youth awakening day, Helmet awareness for public, Book day rally, Blood donor camp and various rallies are organized to the general public which in turn inculcate the students with some responsibilities within them. Religious festival like Onam is celebrated inside campus and Diwali is celebrated with orphanage children and the funds raised from the college are being donated to orphanages. A variety of clubs like NSS, Road Safety, YRC, Tree plantation, etc are included in the curriculum under Personality and Character Development (PCD) course so that every student must indulge in any one activity for each semester. Clubs are added to curriculum and are functioning under the PCD.

The institution provides a culturally inclusive environment with mutual respect, effective relationships and effective rapport. Everyone has the freedom to express their own opinions and equal opportunity to participate in teaching, learning, and social activities. The institution believes in equality of all cultures and traditions as it is evident from the fact that students belong to different caste and religion are studying in the college without any discrimination. The students feel safe and secure at the institute as there is no segregation of students on the basis of their lingual or communal background. The institute maintains complete transparency from the enrollment to the graduation and admissions are done only on merit without any biases.

The harmonious life of multi-ethnic communities in our country reflects in the institutional ambience which creates goodwill among the students towards maintaining peace and national integration. Students Grievance Redressal Cell is also constituted to address the grievances of the students to maintain harmony in the college and has not seen any serious grievances till date. The student representatives of various Clubs and Committees promote harmony and tolerance among students and make them to get sensitized to pluralism and evolve as socially responsible citizens.

Opportunities in Programmes and Activities

Equal opportunities are provided to the students in various activities conducted throughout their course of study irrespective of their caste, creed, and religion. The clubs are included in the syllabus with the motto of inculcating the sense of unity, discipline and harmony. The girls are encouraged to take up leadership roles and participate actively in all student activities. To promote a sense of gender equality, many mixed team sports events are organized. Sports, cultural and technical activities are organized inside the college to promote unity and integration among the students.

Every department also undertakes National Level competitions to give opportunity to all the students to be a part of activities. Conduct of extracurricular activities makes all the students to converge with belongingness which in turn dispel negativity. Regular visits are arranged to Orphanages and Homes for Aged to strengthen values of love and compassion.

Celebrations and Events

The Institution celebrates regional and national festivals and birth anniversaries of national heroes and leaders through cultural programmes and oratorical sessions. Further, National Unity Day, National Science Day, Engineer's Day, and International Yoga Day are also celebrated to establish positive interaction among people of different racial and cultural backgrounds.

Initiatives for Linguistic diversity

English is utilised as a medium of teaching in all the classrooms to bridge the gap between the region specific teaching and the expectations of the students of the other states. To enable the students to work across the world, the other foreign languages like German, Japanese and Hindi have been taught in the campus for our students.

Initiatives for Communal diversity

The students and the faculty of all the communities and religions are a part of this temple of learning which shows that the institute strives to provide conductive environment for all. Moreover, so far there have been no riots in the history of the institute related to any issue.

Initiatives for Socio economic diversity

The students hail from poor family to rich, from the rural areas, study in the institute. To overcome the socioeconomic barriers, the institute has facilitated the students to receive the following scholarships: 5,300 BC/MBC scholarships, 1,238 SC/ST scholarships, 6,010 first graduate scholarships. 8, 669 students have got benefitted from these scholarship schemes during the last five years.

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

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

7.1.9:Sensitization of students and employees of the Institution to the constitutional obligations: values, rights, duties and

responsibilities of citizens(within 500 words).

Nandha Engineering College organizes various events to sensitize students and Employees of the Institution to the Constitutional Obligations: Values, Rights, Duties and Responsibilities of citizen. The value of Human was realized more specifically during pandemic period and it became essential to create awareness about corona virus, and as an initiation social cause pamphlets were created and uploaded in social media. Our Institution we believe in giving holistic all round education to the students. And sensitizing students on our constitutional rights, values, duties and responsibilities of primary education have given in the institute through various means.

Sensitization of students and employees of the Institution to the constitutional obligations is done through curriculum as well as through extra-curricular activities. In curriculum, the subjects which sensitize the students about the constitutional obligations are Essence of Indian traditional knowledge and Also, Constitutions of India, etc. Further a course on Environmental Studies is being offered to give insight into environment acts, wildlife protection act, forest act and global environmental concerns.

Awareness Programme

Besides, many regular programs are conducted in the Institution to educate women about their rights. Also seminars and workshops are conducted on days of national importance on various rights, duties and responsibilities of citizens. Every year police personnel are invited to share their experience and to inspire and motivate young minds to contribute in building the nation. Seminars on topics like Right to Information, sexual harassment are conducted periodically.

The various programs organized are:

1. NSS unit of the institution conducts a cleanliness drive to mark the occasion of Swachh Bharat Abhiyan in the nearby village areas. An oath is being taken by all students and faculties to keep their surroundings clean.

1. Environmental awareness programs - Guest lectures, rally, competition, planting trees programs
2. Awareness camps - For girl students and female faculty, awareness on polycystic ovaries.

3. The Blood Donation Camp (Nandha's Uyir thuli) was conducted by the NSS Club of Nandha Engineering College jointly with Lion's Blood Bank, Erode at college campus and motivated volunteers to donated blood.

4. The students to be aware of their rights and duties Courses like Essentials of Indian Traditional Knowledge and Constitutions of India were added to the curriculum and various seminars were conducted on rights and duties.

5. Village cleaning programs were organized by departments under NSS club have provided platform to understand the livelihood of village and made our students to understand their responsibilities.

6. During natural disasters(Kerala flood relief mission , Gaja cyclone relief fund raiser activity), students are permitted to collect funds/ materials and distribute them to the affected people

7. A few department students have visited orphanage and old age homes and provided the fund which they collect from faculty, staff and students for Independence Day, Republic Day are celebrated to create awareness among the students about Social responsibility.

8. As a Tribute to General. Bipin Rawat on his sad demise. Students of Nandha Engineering College mourned and observed 2 minutes silence on 10.12.2021

File Description	Documents
Details of activities that inculcate values necessary to transform students into responsible citizens	View File
Any other relevant information	View File

7.1.10 - The institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic sensitization programmes in this regard: The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff Annual awareness programmes on the Code of Conduct are organized

File Description	Documents
Code of Ethics - policy document	View File
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	View File
Any other relevant information	View File

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

NATIONAL AND INTERNATIONAL COMMEMORATIVE DAYS, EVENTS AND FESTIVALS

At Nandha Engineering College, all national festivals are celebrated with great enthusiasm to inculcate a sense of patriotism in the students. Every year students come together and perform cultural programs like dance, skits highlighting societal problems. The students also prepare videos and speeches to share their thoughts on these days. Every year legal awareness programmes are organized to educate students to know about the fundamental rights and duties.

National unity day is such event which has been celebrated every year. The day is celebrated to mark the birth anniversary of Sardar Vallabhai Patel. During National Youth day, all the participants are taking oath every year. National flags are distributed to faculty, staff and students to instil sense of pride amongst them.

Independence and Republic are celebrated every year and the students have been participating in various events depicting the different cultures of our country. The NSS unit and the students' association organise many cultural programs to address prevailing social issues. The student staff and alumni participate and rejoice during this celebration with great patriotic fervour.

The Institution also commemorates the birth / death anniversaries of great Indian personalities like Dr.A.P.JAbdul Kalam, Dr. Babasaheb Ambedkar, Chatrapati Shivajimaharaj, and Mahatma Gandhi. The students share the principles of these eminent personalities

through speeches and posters. During Teachers day, the students' of all the departments puts up a show to express their love and gratitude for their teachers.

Engineers' day is being celebrated every year and the departments are conducting various technical events like seminars and symposiums. To inculcate the importance of Yoga among Yoga, International Yoga day is celebrated and faculty and students are performed Yoga and meditation. Women's day is celebrated on International Women's day i.e. March 8 to show respect towards women in all the efforts taken by them to manage the personal and professional life and for their contributions. In this regard, an Award named "Kalki Award "is awarded to women for significant achievement in their field.

To pay due respect to the sacrifices of our Indian soldiers, Kargil Day has been celebrated. Besides all these commemorative days, seminars and guest lectures are regularly organized to inculcate a sense of national pride and gratitude towards sacrifices of great leaders of our country.Voters' awareness day is also another event that has been celebrated recently to insist voting in elections.

File Description	Documents
Annual report of the celebrations and commemorative events for during the year	View File
Geotagged photographs of some of the events	View File
Any other relevant information	View File

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

7.2: Best Practices – (1)

Title of the Practice

In - House Companies

   1. Goal

In - house companies draw the attention of the students as it provides industrial platform during their academic tenure.A target is essential for each student who aspires to get placed. Setting realistic goals for individual students give them a sense of direction and purpose, and help them improve productivity levels.In-house team suits the companies ready to invest in the recruitment processes, in the development of the team and ready to organize amicable work environment for students. Nandha Engineering College aims to bridge the gap between industry and academia. Students are able to gain industrial experience, its culture, norms and the tools of the real time projects.

1. The Context

Nandha Engineering College is focusing on developing the employability skills of the students. The In – House companies act as a reference guide for each skill set and then provide training that is adapted to ensure its trainees development, according to the companies' expectations. i GEN and Thulliyam are the two In - house companies functioning inside the campus. The In – House companies are functioning with the mission of reinforcing company's culture and identity. It can even help to cope up with changes implemented by a company's leadership. The management of the institute is generous in providing ample opportunities for the upliftment of the students.

1. The Practice

All placement willing students are allowed to attend In - house company interview from II year onwards. The In – house companies shortlist the students through the selection process that includes online assessments, programming assessment, group discussion and personal interview. The selected students are given a four month T24 Technical Consultant Training on Arrangement Architecture (AA Core), Versions, Vr Routines, Multi threaded, Design studio, Routines, Templates, Core JED, Directories, Infobasic, COB, TAFC vs TAFJ Basics, BRD/ FSD/ TSD process, Enquires, COS, Tabbed, OFS, HMM/ DLD/ BCON, and a 2 week of "Functional Induction" on Banking Basics, Accounting Basics, T24 and other products, T24 navigation and functional overview.In Thulliam, training on Java OOPS Concepts, Streams and File Handling in Java, Web Services, Introduction Spring Framework, Introduction to Spring Boot, RESTful Web Services with Spring and Spring Boot, RESTful APIs, and Introduction to MySql is provided to the students. During the training process, the modules are assigned to students either individually or as group. The progress of the modules assigned to

the students is monitored by the trainers of the company.

As a part of In House Company Training, programs such as, Industrial Seminar on MYSQL database, Faculty Interaction Industry Exchange Program, Training Activities, Internship and Seminar on Mobile Websites are conducted.

Facilities Provided

The Institution provides a well furnished spacious room of 660 sq.ft with 14 HP computers that are connected by 24 Port Cisco Switches to Thulliam Infotech Pvt Ltd. Further, the company is provided with the system specification of HP Pavilion p2-PC/Core i3, Intel H61 Chipset Motherboard, 4 GB DDR 3 RAM, 500 GB SATA HDD, Memory Card Reader, Atheros AR152 Ethernet Controller and HP LV 1911 18.5 inch LED Moniter.

For iGEN, The Institution also provides a 1,232-square-foot room with 24 HP computers with the same specification as Thulliam Infotech Pvt Ltd. A dedicated Intel server processor (HP DL 360e G8 E5 2403V2) with 8 GB RAM is provided to host high - traffic websites, web applications and for other hosting scenarios.

Each In – House company is provided with two air conditioners to control the temperature and humidity of the server room so that the equipment functions in an efficient manner.

   1. Evidence of success

Through i GEN, around 20 students are getting placed every year. The details are as follows:

S.No

Year

No of students got placed

1.

2018

21

2.

2019

14

3.

2020

14

4.

2021

33

5.

2022

23

In 2018, 21 students got placed in Techmill and Aspire Systems, 14 students got recruited in Techmill, Maveric and Stoics in 2019, in 2020, 14 students got offer from Buzzworks / Temenos and Stoics, in June 2021, 17 students got recruited in Maveric, Buzzworks / Temenos, 16 students got placed in ITSS in Sep 2021 and currently 23 students are undergoing training for GCI Consulting, Australia.

In 2018 – 2019, 14 students got placed in Thulliam and in 2019 – 2020, 5 students underwent Internship training.

   1. Problems Encountered and Resources Required

Allocating training slots for students /faculty training during the academic process are challenging.

Establishing relationship and signing of MoU with reputed industries is a challenge for the rural based Institution. Follow up activities to retain the partnership becomes a demanding one.

Establishing In – house Companies with high – tech infrastructure is expensive.

7.2: Best Practices – (2)

Title of the Practice

Personality and Character Development (PCD)

1. Goal

Development of the all-rounded individual is the principal goal of PCD in colleges. PCD aims to develop character with competence and also emphasizes on invoking hidden skills which are very vital to deal with the current scenario of challenging competitions. The experiences, the students gain through PCD, positively influence their emotional, intellectual, social, and inter-personal development. Taking part in the out-of-the-classroom activities helps students to understand the importance of critical thinking, time management, academic and intellectual competence and connect them with society. Working with diverse groups of individuals allows the students to gain more self-confidence, autonomy and appreciate others' differences and similarities. Moreover, the students learn to negotiate, communicate, manage conflicts and lead others.

2. The Context

Good personality benefits the students with better social and professional life. Personality includes the qualities like character, behavior and attitude which promote the students' confidence, self – esteem and positive attitude. Taking this into consideration, to enhance the traits of personality and character among the students, Personality and Character Development course is introduced in Nandha Engineering College. Under PCD, clubs like Cultural & Fine Arts club, NSS, Tree plantation club, Road Safety club, Youth Red Cross (YRC), Trekking club, Music club, Photography club and Sports club are functioning effectively. Through the club activities, students are made to aware of their roles and responsibilities in elevating of society.

3. Practice

All students should enroll in any one of the personality and character development program and attend 30 hours of activities.

1. National Service Scheme (NSS) was introduced in NEC with the objective of developing the personality and character of the students through voluntary community service. The NSS volunteers involve themselves in several activities in the villages in and around. The students plant saplings, conduct

medical camp for the welfare of the people, create awareness among school students and village people on health, clean water tanks and streets, etc.,

2. Sports Club encourages the enrolled students to take part in the Sports and Games in which they are interested. The club functions with the motive of developing confidence, leadership qualities and team spirit in students. The Sports club of NEC offers Basketball, Volleyball, Throw ball, Badminton, Carrom, Chess, Kabadi, Cricket, etc.,

3. Youth Red Cross (YRC) of NEC organizes activities related to social services like Blood Donation Camp, Eye Camp and Awareness rallies.

4. Tree Plantation Club makes arrangements for planting saplings in Erode District by joining hands with social welfare organizations.

5. Road Safety Club creates awareness among the students about the traffic rules and regulations by conducting classes and photo exhibitions by the experts from motor vehicles department. Further, conducts awareness programmes for Pedestrians, two and four wheeler riders in the areas in and around Perundurai.

6. Music club helps the students to learn playing different musical instruments by appointing trainers.

7. Photography Club students are trained under professionals for taking eye capturing pictures.

8. Trekking Club gives opportunities to the students to explore nature and be a part of it and enables the trekkers to adjust themselves in new environment with unforeseen eventualities.

9. Fine Arts Club motivates the students to bring out their hidden talents, creativity and Innovation.

10. Every student should have minimum of 75% attendance in the club activities. The club activities will be completed during the first year of the program. However, for valid reasons, the Principal may permit a student to complete this requirement in the second year.

Students' Industrial Preparatory Wing

Students' Industrial Preparatory Wing (SIP) of the Institution joins hands with industries to enhance technical and social skills of the students and also to prepare them industry ready. Syllabus is framed to reduce the sizable gap between the industry and the Institution and acquaint the students with the recent trends in industries by obtaining inputs from industrial experts. Through institute industry collaborative training programme, the

Institution provides opportunity for the students to get industrial exposure during the tenure which ensures creation of industry ready engineers. The subjects relevant to Industries are given due importance and are taught as hands-on practical sessions with real time examples by well-trained faculty members. Keeping this in forefront, the industry relevant subjects handling faculty members are given training in industries and they in turn train the students through the practical sessions.

Centre of Excellence refers to a team, a shared facility or an entity that provides practices, research, support and training for the specific sectors. It facilitates the collection of standards and practices in an institution to develop the skills of team members and to transform the institution to the next level. It works in partnership with industry, to raise training standards, boost productivity, address emerging skill gaps and align training & research to meet out the industry needs. Aiming towards it, the Institution has signed MoU with reputed organizations like Infosys – Campus connect, Vectra Technosoft, (Redhat Linux), PALS, ICT Academy, TMI systems, Prashan Medical Technologies, ABB power projects, Chennai, Nexware Technologies, Coimbatore, Kulothung Automation, Erode, Calibre Instruments, Coimbatore, Pantech Solutions, Coimbatore, Vi Microsystems Pvt. Ltd., Chennai, BSNL, Erode., LIVEWIRE-A Division of CADD Centre, Sustainable Comminutiies India Pvt. LTD, The Creator Industries, Bhavani, Jeyam CNC CAD/CAM Design Technologies, Chennai, Common Effluent Treatment Plant(CETP), SIPCOT, Shakthi Knitting Private Limited, Fermion Energy & Engineering Solutions Pvt. Ltd., Sim Infosystems Private Ltd, Chennai and EEDISSIA. Promoting Employability Skill is mandatory to meet out the requirements of the industries. It is imperative for the students of higher educational institution to have an effective mix of knowledge, skills and personal attitudes in order to be employed initially and function successfully in the required roles. Keeping this in view, Placement and Training cell of the college provides meticulous training and organizes career guidance programmes for all the students to enhance their employability skills of the students. Further, the placement cell provides training on interview skills, group discussions, communication skills, etc., Moreover, the student chapters of various national and international professional bodies provide enough scope for students to shape their professional skills. The Technical Association in each department acts as an additional platform for the students to enhance the technical and organizational skills. Being supported by these trainings, the students are placed in reputed National and International software and hardware companies like TCS, CTS, Wipro Technologies,

Capgemini, Hexaware, Infosys, LGB Groups, LMW, Purple State, Virtusa, DXC Technology, etc.

4. Evidence of success

Active involvement and participation in various PCD activities made the students exhibit their innate positive character and enhanced classroom behavior. The same is being witnessed in their co-curricular activities.

In Placement, NEC has produced a high track record in the past five years: 530 students got placed in the academic year 2016 – 2017, 400 students got placed in the academic year 2017 – 2018, 424 students got placed in the academic year 2018 – 2019, 320 students got placed in the academic year 2019 – 2020 and 412 students got placed in the academic year 2020 – 2021.

5. Problems Encountered and Resources Required

Allocating schedules for students during the academic process are challenging.

Proper maintenance of the planted saplings is the need of the hour.

Resources Required- Transport facilities are being provided to take the students outside the campus. Additional Musical instruments are in need to train the students.

The following are the list of Clubs:

S.NO

LIST OF CLUBS

1.

National Service Scheme (NSS)

2.

Sports Club

3.

Youth Red Cross (YRC)

4.

Tree Plantation Club

5.

Road Safety Club

6.

Music club

7.

Photography Club

8.

Trekking Club

9.

Fine Arts Club

10.

Student's Industrial Preparatory Wing

File Description	Documents
Best practices in the Institutional website	https://nandhaengg.org/7-2-best-practices/
Any other relevant information	https://nandhaengg.org/wp-content/uploads/2022/03/7.2-Best-Practices.pdf

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)

Institution Distinctiveness

Acceleration in the technological advancement in recent times urges the students to be industry-primed by acquiring eclectic skills while graduating from the institutes of higher education.

The advancements will encourage, inspire and nurture young students by exposing them to new ideas and processes resulting in innovative activities. In consistent with the above, the technical institutions started to establish forums to enable students to employ their novel and creative ideas originating from fundamental concepts learnt in the classroom and to perpetuate the hands-on knowledge gained in the laboratory into a new product.

To ensure Innovation as a prime kingpin, Nandha Engineering College has introduced the following platforms to build the culture of innovation and to transform dream ideas into reality.

- Institution's Innovation Council (IIC)

- Centre for Innovation and Product Development (CiPD)

- Business Incubator (BI)

The afore mentioned wings at Nandha Engineering Collegeaim to develop new products that will have a societal impact by leveraging exhaustive technology.

Institution's Innovation Council (IIC)

Nandha Engineering College, as per the guidelines of Ministry of Human Resource Development Innovation Cell (MIC), has constituted Institution's Innovation Council in the year 2018. IIC mainly focuses in encouraging, inspiring and nurturing young students by exposing them to new ideas and processes resulting in innovative activities in their formative years.

The major focus of IIC is

1. To encourage the creative energy of student population to work on new ideas and innovation and promote them to develop products.
2. To develop better cognitive ability for Engineering/technology students and to create complete ecosystem which will inculcate the culture of Innovation.
3. To conduct various innovative and entrepreneurship-related activities prescribed by MIC in time bound fashion.
4. To identify and reward innovations and share success stories.
5. To organize periodic workshops/ seminars/ interactions with innovators / startups / entrepreneurs, professionals and create a mentor pool for students' innovations.

6. To network with peers and national entrepreneurship development organizations.

Centre for Innovation and Product Development (CiPD)

CiPD was promoted in Nandha Engineering College in 2015 with the aim of creating spark of innovation in the students' mind and to expose them to the existing problems that need to be solved. It encourages the students to come up with ideas which have innovation, Intellectual Property Right (IPR) component and potential commercial value. It connects the students with experts for mentoring. Project making, project exhibition & presentation, hackathon and participation in competitions are part of our yearly event (Innovation Day) schedule. The CiPD plays a vital role in inviting innovators, researchers, successful startups/entrepreneurs from varied fields to share their experience for problem solving and success scenarios which may benefit students/faculty members of the Institution. Further, the centre aims to build an interdisciplinary networks and teams for students and facilitate understanding of subtle aspects of innovation, IPR, startups and entrepreneurship.

PROGRESS OF CiPD

Objectives

1. Motivating the students to think laterally and out-of-the-box to generate innovative ideas
2. Transforming innovative ideas into products of societal needs
3. Providing required technical guidance by mentoring the students to carry out the project

effectively.

1. Filing patents and commercialization of the products in the long run Work Flow of CiPD.

Business Incubator (BI)

NEC Business Incubator (BI) is an institutional mechanism providing a conducive ecosystem to promote the innovation, product development, startups and entrepreneurship. Nandha Engineering College was officially approved by MSME (Govt. of India, Delhi) as a Host Institution (HI) for idea incubation from 2018.

It aims to encourage students with innovative ideas & entrepreneurial spirit to become entrepreneurs by imparting skills via training Programmes. Besides students, general public with inclination for novel idea-based business ventures and existing companies interested in incubating unique spin of ideas towards commercialization can also avail the BI platform. MSME is providing funding support up to INR 15 Lakh per approved idea through the business incubators.

Ranking

IIC of Nandha Engineering College has been awarded five star and four star rating by the Ministry of Education (MoE) for innovation and startups for the year 2019-2020 & 2020-2021 respectively.

Grants

BI of NEC has been funded with Rs.15 lakh for the idea Roll and Pull Uprooting Machine which is helpful to the small and marginal farmers to harvest Tapioca with less manpower. The product development is in the verge of completion and is expected to be completed in July 2022.

Patents and Copy rights

21 patents have been obtained by faculty and students for their invention and 30 copyrights have been granted for the creative work of faculty and students.

Product Launch- Automatic Sanitizer Dispenser and Automatic Hand Sanitizer developed by Mr.M.Seenivasan, AP/ ECE and Mr.R.K.Boopesh of second year ECE were launched.

1. A project titled Automatic Alert for Sleepy Drivers was done by Mr.S.Premnath, Ms.R.Dhivyarani and Mr.L.Mohanasundar of Second year EEE through CiPD. It alerts the drowsy driver to avert accidents
2. Automatic Seed Sowing Farobot Using Arduino was developed by Jobin Joseph, A.J.Arsha, C.M. Drishya and P. Nayana of second year Agriculture Engineering students to overcome the problem of labour shortage.
3. Solar Inverter developed by Mr. M.Arunprasath, Mr. P.S.Karthickh Raghunath, Mr. S.Kavin Kumar and Mr. K.C.Santhosh of III year EEE with the guidance of faculty members Mr.S.Prabhakaran, AP/EEE and Mr.P.Krishnagandhi,AP/EEE.

Programmes Organized

In order to nurture innovation culture, entrepreneurship and Intellectual Property Rights among the students, CiPD of NEC organizes various awareness programmes, workshops and seminars by inviting experts and officials as resource persons.

File Description	Documents
Appropriate link in the institutional website	https://nandhaengg.org/7-3-institutional-distinctiveness/
Any other relevant information	[View File](#)

7.3.2 - Plan of action for the next academic year

Plan of Next Year

- **To revise the regulations and syllabi of various courses depending on the need of the industry in present scenario.**
- **To motivate the faculty members to improve the number of video lectures for various courses, apply and receive research proposals provided by various funding agencies.**
- **To encourage the students to carry out more industry projects, internships and get practical exposure to recent technologies.**
- **To make the students to improve the interest in self study by enrolling in online courses like NPTEL, Udemy and also industrial courses.**
- **To conduct more programs related to higher studies and entrepreneurships for improvement of students.**