# YEARLY STATUS REPORT - 2022-2023

| Part A | |
|---|---|
| **Data of the Institution** | |
| 1.Name of the Institution | National Engineering College |
| • Name of the Head of the institution | Dr. K.Kalidasa Murugavel |
| • Designation | Principal |
| • Does the institution function from its own campus? | Yes |
| • Phone No. of the Principal | 04632222502 |
| • Alternate phone No. | 04632230227 |
| • Mobile No. (Principal) | 9442280227 |
| • Registered e-mail ID (Principal) | principal@nec.edu.in |
| • Address | K.R. Nagar, Nalatinputhur |
| • City/Town | Kovilpatti |
| • State/UT | Tamilnadu |
| • Pin Code | 628503 |
| 2.Institutional status | |
| • Autonomous Status (Provide the date of conferment of Autonomy) | 05/05/2011 |
| • Type of Institution | Co-education |
| • Location | Rural |

| | |
|---|---|
| • Financial Status | **Self-financing** |
| • Name of the IQAC Co-ordinator/Director | **Dr.L.Kalaivani** |
| • Phone No. | **04632222502** |
| • Mobile No: | **9843008500** |
| • IQAC e-mail ID | **iqac@nec.edu.in** |
| **3.Website address (Web link of the AQAR (Previous Academic Year)** | [https://nec.edu.in/iqac/#AQAR-reports](https://nec.edu.in/iqac/#AQAR-reports) |
| **4.Was the Academic Calendar prepared for that year?** | **Yes** |
| • if yes, whether it is uploaded in the Institutional website Web link: | [https://nec.edu.in/academic-calendar/](https://nec.edu.in/academic-calendar/) |

**5.Accreditation Details**

| Cycle | Grade | CGPA | Year of Accreditation | Validity from | Validity to |
|---|---|---|---|---|---|
| **Cycle 1** | **B++** | **2.83** | **2017** | **22/02/2017** | **21/02/2021** |
| **Cycle 2** | **A** | **3.08** | **2022** | **07/06/2022** | **06/06/2027** |

| | |
|---|---|
| **6.Date of Establishment of IQAC** | **06/06/2013** |

**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 |
|---|---|---|---|---|
| National Engineering College | DST-FIST | DST, New Delhi | 20/09/2018 | 21,50,000 |
| National Engineering College | New Generation Innovation and Entrepreneurship Development Centre (NewGen IEDC) | NSTEDB, EDII, Ahmedabad & DST, New Delhi | 15/06/2017 | 2,87,50,000 |

**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** | 1 |
|---|---|
| • 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)**

• Coordinating quality related activities such as NBA, NAAC, NIRF, AICTE-CII survey, ARIIA and IIC 4.0 • Measuring the quality targets based on various cadres of faculty members, departments, institute and analyzing the gap, and taking follow up action • Arranging

training for the various competency requirements by the academic experts. • Creating an indigenous NEC Learning Management Systems platform for the active Teaching Learning process • Conducting Academic and administrative audit to ensure the conducive learning environment • Establishing an innovation ecosystem by Conducting hackathons and entrepreneurial development programs

**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 |
| --- | --- |
| Being mandatory for all faculty members to attend Faculty Development Programs in reputed institutions in the upcoming years | 85 percent of the faculty members have attended Faculty Development Programs during the year |
| The faculty members are motivated by the Research and Development Review Committee to publish their research finding in SCI journals and apply research funding in various agencies. | 70 research papers are published by our faculty members in reputed international journals so far. |
| Providing various Placement oriented training programs such as BEC, CODE IT, communication skill training, C programming and Python for the students | Several Programs were organized for students regarding placement |
| All the faculty members are encouraged to attend industrial training in every year. | 30 percent of Faculty member have undergone Industry Know How Program, which is financially supported by the Institute. |
| Planned to organized funded programs for the benefit of the faculty and students | 3 sponsored programs and 40 self- supporting programs conducted during the year |
| Planned to increase the funding for project and consultancy. | Rs.7.1 Lakhs worth of consultancy work completed by the faculty members and Rs.65.7 Lakhs worth of fund received from various Govt. agencies during the academic year. |
| To develop products through students projects and to get patents through innovative products | NSTEDB-DST, Govt. of India, New Delhi and EDII, Ahmadabad has funded our institute to set up NewGen IED Centre. The NewGen IEDC of our institution was granted with Rs. 1,67,50,000/- to develop 50 numbers of commercially viable students' projects. So far, 65 numbers of commercially viable products |

| | |
|---|---|
| Students are encourage to became entrepreneur with pioneering ideas through NEC Business Incubator Cell K.R. Innovation Center | Ministry of MSME, Government of India has recognized NEC as a Host Institute for business Incubation activities and sanctioned Rs.29.39 lakhs to five incubators to develop products. Our Institute has framed NEC Innovation and Startup Policy 2020 (NECISP 2020) to motivate innovation and entrepreneurship culture among students, faculty, alumni and external aspiring entrepreneurs. K. R. Innovation Centre (KRIC) has conducted two cohorts such as NEC Startup Entrepreneurship Summit (NECSES) and Startupathon in 2021. So far, 2 startups have graduated with Series-B funding and 17 startups are under incubation in KRIC |
| To get consultancy projects through industrial know how program by faculty members | 25 activities have been carried out with 8 MoUs signed with various industries. |
| To Publish research papers in SCI Journal by PG students and Scopus journals by UG & PG students | 5 SCI journals, 41 Scopus publications and 41 IEEE Conference publications have been published through student projects |
| NPTEL Certification by Students Faculty Members. Co - Curricular and Extra Curricular Activities The following co - curricular and extra - curricular activities enable the students to acquire soft skills and interpersonal skills. | 71 percent of faculty members have done NPTEL certification. |
| Conducting awareness programs and programs related to Entrepreneurship for the students | 10 Programs were conducted for our students through ED cell and IIC. |
| Conducting various Guest | 4 Programs were arranged by NEC |

| | |
|---|---|
| lectures and alumni interaction on current topic | alumni chamber and more no. of interaction have been made through every departments |
| Organizing Industrial Visit based on their discipline | Various clubs like NSS, NCC and Social Awareness camp have been conducted in and around Kovilpatti |
| Conducting awareness programs and programs related to Entrepreneurship for the students | 16 Programs were conducted for our students through ED cell and IIC. |
| Conducting various Guest lectures and alumni interaction on current topic | 4 Programs were arranged by NEC alumni chamber and more no. of interaction have been made through every departments |
| Organizing Industrial Visit based on their discipline | Various clubs like NSS, NCC and Social Awareness camp have been conducted in and around Kovilpatti |
| Planned to conduct workshop to enhance the skills among the students in the Odd Saturdays Social Activities The following social activities will be carried out to give humanitarian Perspective and values of life to our college students and to give knowledge and technological exposure to the students of rural area. | 22 Program is conducted for school students |
| Conducting laboratory practical sessions for rural area school students Implementation of e - learning for school students in villages | It is planned to provide E-learning session for the school students in upcoming year |
| Arranging orphanage visit for our students | NSS Volunteers visited orphanage regularly during festivals. |

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

- Name of the statutory body

| Name of the statutory body | Date of meeting(s) |
|---|---|
| Governing Board | 13/03/2024 |

## 14.Was the institutional data submitted to AISHE ?

Yes

- Year

| Year | Date of Submission |
|---|---|
| 2022-2023 | 31/03/2024 |

## 15.Multidisciplinary / interdisciplinary

- Delineate the vision/plan of institution to transform itself into a holistic multidisciplinary institution.

In Regulation 2019, we have courses which supports holistic and multidisciplinary education under the trans-disciplinary category such as Indian History, Indian Culture and Heritage, Global challenges and issues, Sustainable development and practices, Indian Economy, International business management, Impact of social media on society etc., An ethic of social engagement, a course on Soft Skills and Interpersonal Communication is offered to students. In 2023 Regulation we have a plan to introduce more courses such as Introduction to philosophical thoughts, Introduction to Art and Aesthetics, Indian music system in the Non-CGPA category.

The institution has taken initiatives in offering verticals under multidisciplinary domains for award of degree in Honors, Honors with specialization in the same discipline and minor degree for other discipline.

- Delineate the Institutional approach towards the integration of humanities and science with STEM and provide the detail of programs with combinations.

Already the curriculum has been designed with various components which includes Basic science courses (13 to 17%), Humanities and management courses (4 to 8%), Engineering Science courses (12 to 20%), Program core courses (30 to 45%), Program elective courses (9 to 15%), open elective courses (4 to 11%), skill development courses

which includes project (7 to 9 %) and mandatory courses such as environmental science and Engineering and Constitution of India. In align with industry requirements, more elective courses are offered in multidisciplinary domains.

- Does the institution offer flexible and innovative curricula that includes credit-based courses and projects in the areas of community engagement and service, environmental education, and value-based towards the attainment of a holistic and multidisciplinary education. Explain

Yes. The institution offer flexible and innovative curricula that includes credit based courses and projects in the areas of community engagement and service, environmental education and value-based towards the attainment of a holistic and multidisciplinary education. A course on Innovation through design thinking has been introduced in the first year, with the course outcome of practice design thinking process through a multidisciplinary task.

Through Product development laboratory course, Project work -I and Project work -II, students are motivated and engaged in developing prototype model for societal problems. Students are exposed to industry experience through internship in the reputed companies. The students have the provision to study the courses related to personality and development and to practice in allied skills and value based education under non-CGPA category. Environmental education and awareness is being given to the students through curriculum and through non-CGPA courses.

- What is the institutional plan for offering a multidisciplinary flexible curriculum that enables multiple entry and exits at the end of 1st, 2nd and 3rd years of undergraduate education while maintaining the rigor of learning?Explain with examples.

The current regulation R 2019 has been designed with Engineering Science courses and skill development courses from first year onwards. Electives are offered from second year onwards in addition with core courses. Programming oriented courses are introduced in all disciplines to enable the students to place in software companies through internship from third year onwards. Industry oriented trainings are given to the students through one credit courses by Industry expert for enabling the students to get placement in core companies. Students have the choice to select elective courses in multidisciplinary domain for getting placement opportunities in diversified field and also for self learning. In

2023 Regulation, we have a plan to introduce flexible curriculum to support employable skills at the end of 1st year, 2nd year, 3rd year and final year.

- What are the institutional plans to engage in more multidisciplinary research endeavours to find solutions to society's most pressing issues and challenges?

To bring research culture, interdisciplinary projects, research are encouraged among the students and faculty. One practical course on Research paper and patent review seminar has been introduced in the final year in addition to project works.NEC NEWGEN IEDC centre has been established to support multidisciplinary commercial viable products. So far 44 patents were filed from the outcome of the multi disciplinary projects. To achieve high quality research ambience in the institute, NEC has research centres recognized by Anna University, Chennai in the faculty of Information and Communication Engineering, Electrical and Electronics Engineering, Mechanical Engineering and Chemistry. The institution encourages collaborative research work with R&D institutions and industries to find solutions to societal problems.

- Describe any good practice/s of the institution to promote Multidisciplinary / interdisciplinary approach in view of NEP 2020.

Institution promotes multidisciplinary skills to the students through the courses such as design thinking, critical thinking, problem solving techniques, product development lab etc.. Students are allowed to take courses from other programmes through open elective category. Students can choose the set of courses from other programmes in the form of minor degree.

## 16.Academic bank of credits (ABC):

- Describe the initiatives taken by the institution to fulfil the requirement of Academic bank of credits as proposed in NEP 2020.

Institution has taken initiatives to fulfill the requirements of Academic bank of credits (ABC) as proposed in NEP 2020. As a first step, the institution follows digital evaluation of the papers, showing the evaluated papers digitally before publish of results, digital storage of papers and further to digital storage of marksheets with grades and credits. This facilitates the use of ABC for credit transfer across higher educational universities. The ABC

facilitates multiple-entry multiple exit, anytime anywhere learning, allows student to study at their own pace.

- Whether the institution has registered under the ABC to permit its learners to avail the benefit of multiple entries and exit during the chosen programme?Provide details.

The institution has registered under ABC for digitally storing the academic credits. So far first semester data of current second year students (483) have been uploaded via National Academic Repository (NAD) portal for enabling students mobility across Higher Educational Institutions.

- Describe the efforts of the institution for seamless collaboration, internationalization of education, joint degrees between Indian and foreign institutions, and to enable credit transfer.

The institution permits students to earn credits through online courses such as NPTEL, SWAYAM and other online platforms such as EDX, Coursera subject to a maximum of 15 credits. Some of the one credit courses are handled by industry expert as a collaborative work. Students projects are jointly guided by industry mentors and internal faculty members.

- How faculties are encouraged to design their own curricular and pedagogical approaches within the approved framework, including textbook, reading material selections, assignments, and assessments etc.

In our autonomous institution, faculties are encouraged to design their own curricular and pedagogical approaches for the effective teaching and learning process. Each academic department is having several domain expert groups which are consisting of faculty members with same technology interest. Every faculty member is allowed to undergone industrial know-how in reputed industries, faculty development program organized by IITs/NITs/IIITs and NPTEL course every year to understand the current trends and technology on the domain-of-interest. Based on the domain knowledge acquired by the faculty members, they are framing the curriculum with foundational courses and courses with current trends to reduce the gap between academia delivery & industrial expectation from the graduates. Each academic department is collaborating with reputed industries through memorandum of understanding for faculty training, student internship, consultancy work, and curriculum design. As the outcome of the MoU, NEC establishes Technobation centres for the industries

inside the campus. Faculty members are interacting with the industrial experts while framing the curriculum. Keeping in mind the employability, innovation and research in emerging fields, social relevance and social needs, the contents of the syllabus are framed by the faculty and presented in the Board of Studies (BOS) for recommendation. The suggestions given by the BOS members are incorporated and presented during Academic council meeting for approval. While framing the syllabus, faculty members suggest the relevant and standard books to be included. In course committee meeting, group of faculty members who are all handling the particular course, discuss about the content delivery methods, assessment procedure and rubrics for evaluation.

- Describe any good practice/s of the institution pertaining to the implementation of Academic bank of credits (ABC) in the institution in view of NEP 2020.

As a initial step, awareness about ABC has been given to faculty and students. At present all first year students have registered and generated ABC ID card through Digi Locker portal and students shall view the dash board for further process .The credits of the students have been uploaded in the NAD portal. In the future, all students' data would be uploaded in the portal for the students mobility across higher education Institution. Faculties are encouraged to attend workshops related to NEP 2020.

## 17.Skill development:

- Describe the efforts made by the institution to strengthen the vocational education and soft skills of students in alignment with National Skills Qualifications Framework

Students are encouraged to attend technical symposium, paper presentation, Hackathon to showcase the soft skills and for further exploration. Students are motivated to do a quality project work, paper publication in reputed journals, internship in reputed companies, patent filing etc., in align with National Skills Qualifications Framework.

- Provide the details of the programmes offered to promote vocational education and its integration into mainstream education.

As per the guidelines of Anna University Chennai, Engineering courses are offered in different programmes along with multi disciplinary courses.

- How the institution is providing Value-based education to inculcate positivity amongstthe learner that include the development of humanistic, ethical, Constitutional, and universal human values of truth (satya), righteous conduct (dharma), peace (shanti), love (prem), nonviolence (ahimsa), scientific temper, citizenship values, and also life-skills etc.

In the first year before the start of academic classes, the students are undergoing induction program for 15 days to inculcate value education. The induction program, enable the students to explore Universal human values, holistic vision of life with right understanding, mutual happiness and mutual prosperity. The importance of feelings or core values such as trust (foundational value), respect, affection, care, guidance, reverence,gratitude, glory and love (complete value ) are taught in the induction programme. Through the course on Constitution of India, students are aware of constitution and its frame work. To understand the professional and ethical responsibilities, a course on Professional ethics and human values has been introduced in the curriculum. Students are powerful assets to the society. To impart one of the basic life skill, Yoga for youth empowerment course is offered to the students to improve their focus, control, emotional balance and stress management. NCC and NSS activities provide the life management skills for the students. The course on critical thinking and design thinking are offered to the students for empathy making and to come up with innovative product.

- Enlist the institution's efforts to:

- Design a credit structure to ensure that all students take at least one vocational course before graduating.

Vocational courses are training based courses that aim at preparing students for a particular career, skill or trade. The industry need courses are offered as value added courses as one credit course which are equivalent to one vocational course, offered in each department. After successful training for one or two months, assessments are carried out and successful trainers are provided with certificate. The credit structure is designed with many one credit courses in each department in collaboration with industries. This provision facilitates the students to place in core/software

companies.

- Engaging the services of Industry veterans and Master Crafts persons to provide vocational skills and overcome gaps vis-à-vis trained faculty provisions.

The industry experts play a vital role in framing the curriculum and syllabus. The industry experts contribute his services to fill the gap between the academic and industry. They used to visit the institution twice in a month and demonstrate the experiments as industrial perspective. Our faculty is also visiting the industry and get trained in particular domain, and transforming the knowledge gained into projects. Students visits the industry once in year for further updation of knowledge and skills.

- To offer vocational education in ODL/blended/on-campus modular modes to Learners.

NPTEL/SWAYAM, IGNOU are offering vocational courses through online platform. Our students are permitted to register in the online courses and are allowed for credit transfer as elective courses. It can be a one, two or three credit courses.

- NSDC association to facilitate all this by creating a unified platform to manage learner enrolment (students and workers), skill mapping, and certification.

In the first phase, students are enrolled in a Naan Mudhalvan scheme portal, which are coming under NSDC association and undergone psychometric test (robust candidate assessment) in the portal. 17 faculties have been trained under this scheme in various emerging areas such as machine learning, artificial intelligence, IOT Enabled applications, Augmented reality and Virtual reality etc., The courses were handled by industry experts during the training.

- Skilling courses are planned to be offered to students through online and/or distance mode.

Under the Naanmudalvan Initiative, the Government of Tamilnadu has launched Nalaiya Thiran – an experiential project-based learning program, with Anna University as the University Ecosystem Partner, IBM as the Technology Partner, ICT Academy as the Support Partner, and NASSCOM as the Skills Certification Partner. IBM has identified 50 industry problem statements for which students shall build solutions while they undergo 100 hrs. of project-based learning as an elective course with 3 academic credits. Under this scheme, the

students of Computer science and Engineering, Information Technology and Electronics and Communication Engineering undergone a course through online mode on 'Professional readiness on Innovation, Employability, Entrepreneurship', under the mentors and evaluators of institutional faculty and industry expert.

- Describe any good practice/s of the institution pertaining to the Skill development in view of NEP 2020.

Keeping in mind the skill development of the students, institution has taken many initiatives through Curriculum.

1. Introduced "Innovation through Design thinking" two credit , integrated course, in the first year curriculum. To handle the course effectively, first faculty member were given training.
2. In the first phase, all faculty members were given training on Design thinking, handled by IITM Professor Dr.S.Ganesh. In the second phase, thirty faculty members attended the workshop organized by Industry mentors Mr.Selvakumar Palaniappan and Mr.Balaji from M/S.Atol Syntel, Tirunelveli .

3. Introduced theory course on Problem solving techniques (3 credits) and Problem
solving techniques laboratory course (2 credits) in the first year.

4. A course on product development laboratory (two credit, integrated) has been
introduced in the sixth semester for need identification, target specifications, concept
selection, prototyping and demonstration

5. Internship in reputed companies is must for students to have industrial experience.
Students will work under industry mentor for about 3 months in a specific area.
Credits can be claimed after successful completion, submitting report and evaluation
by team of experts including industry mentor.

6. Introduced Project management and finance as a core paper in the final year as a three
credit course for the successful implementation, monitoring and control of projects.

1. Students will do Project in the final year as a theoretical study / analysis / prototype

design / modeling and simulation or a combination of these for societal problems.

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

- Delineate the strategy and details regarding the integration of the Indian Knowledge system (teaching in Indian Language, culture etc,) into the curriculum using both offline and online courses.

At present, all the courses are taught in English only. In the future, with the guidelines from Anna University, necessary initiatives will be taken.

- What are the institutions plans to train its faculties to provide the classroom delivery in bilingual mode (English and vernacular)?Provide the details.

At present faculty class room delivery is in English only.

- Provide the details of the degree courses taught in Indian languages and bilingually in the institution.

At present all the degree courses are taught in English only.

- Describe the effortsof the institution to preserve and promote thefollowing:

- Indian languages (Sanskrit, Pali, Prakrit and classical, tribal and endangered etc.)
- Indian ancient traditional knowledge
- Indian Arts
- Indian Culture and traditions.
    - Describe any good practice/s of the institution pertaining to the appropriate integration of Indian Knowledge system (teaching in Indian Language, culture, using online course) in view of NEP 2020.

## 19.Focus on Outcome based education (OBE):Focus on Outcome based education (OBE):

- Describe the institutional initiatives to transform its curriculum towards Outcome based Education (OBE)?

OBE is the student centric approach, which enables the students for better employability, as entrepreneur, as researcher after the graduation through need based curriculum and development process.

The role of stakeholders such as faculty, Alumni, academic experts and industrial experts are vital in the OBE framework.

Institutional targets and department targets are fixed. In order to achieve the target, various meetings such as class committee meeting, faculty meeting, parent's teachers meetings, department advisory board meeting are conducted periodically to monitor the progress of the students. The institution involves internal and external academic experts from reputed Academic institutions and industry experts for the curriculum development process by including them in the Board of Studies (BOS) and Academic Council which are statutory bodies that are responsible for the Curriculum development process. Student representatives are also involved in the BOS and Academic Council meetings. Student feedbacks are collected through exit survey and class committee meetings. Student outcomes are measured based on the number of students placed in a company, number of students selected for higher educations, number of entrepreneurs etc.,

- Explain the efforts made by the institution to capture the Outcome based education in teaching and learning practices.

Outcome-Based Education (OBE) has been implemented in our Institute since 2013. OBE emphasizes what is expected from the student when they finish their course. In line with OBE, Program Specific Outcomes (PSOs), Program Outcomes (POs), and Course Outcomes (COs) have evolved. The COs attainments are calculated based on the threshold, target, no. of students attained threshold in continuous assessment test and End Semester Examinations. Program Outcomes (POs) are aligned with the Graduate Attributes defined by NBA. Program Specific Outcomes (PSOs) are specific and relevant to a particular program. After CO-PO, CO-PSO mapping, CO-PO, CO-PSO attainments are calculated and analyzed for further improvement in teaching learning practices. Based on the attainments, the content delivery method, assessment procedure is modified to meet the OBE requirements.

- Describe any good practice/s of the institution pertaining to the Outcome based education (OBE) in view of NEP 2020.

The vision, mission, POs, and COs are explained to first-year students and other stakeholders during the induction and orientation program. The course instructor outlines the justifications and methods for attaining the Course Outcomes. While beginning the

course, the course instructor explains the process used to achieve COs and the assessment tools used to measure that attainment.

The students are issued a course syllabus copy and course plan with COs. The students are briefed about the course outcomes and program outcomes at the start of the semester in the classes, course plans, and class committee meetings.

The assessment of CO is mandatory for Lab and Theory courses. The assessment of
COs is done based on the assessment pattern fixed for the particular course by the Course Coordinator and Instructors. The calculation of attainment is based on the student's performance in every category in direct and indirect methods. During the commencement of the semester, the target value for the course will be fixed by the Course Coordinator and Instructors. The method of assessment is informed to the students clearly. The Faculty members team will do a review of the assessment in due course, and suggestions will be provided for the necessary actions for improvement.

The calculation of COs of a course is measured by both the direct and indirect assessment tools. Direct assessments are made from the performance in continuous internal assessments, assignments, tutorials, mini project and project work review, seminars, quizzes, Course exit survey, and end semester examination. Indirect assessment is made from the Course End Survey. The direct and indirect assessments are given 90% and 10% weightage, respectively. The Course Coordinator and Instructor frame the course end survey questions to indirectly find the student's confidence level in the COs.

The theory courses consider the periodical test marks, end-semester examinations, assignments, and innovative practices (Quiz, seminars, open-book tests, etc.). The course instructor needs to map questions to specific COs in the Assessment-CO matrix.

For the practical course, the assessment tool is based on the continuous assessment of every experiment. The experiments completed by the students are evaluated based on Rubrics, including their knowledge in designing, conducting, and analyzing the results.

At the end of the course, the Course Coordinator and Instructor measure the attainment of COs based on the above assessment methods and report about their observations and actions that need to be taken for further improvement in the assessment process.

**20.Distance education/online education:**

- **Delineate the possibilities of offering vocational courses through ODL mode in the institution.**

**So far no vocational courses are offered in the institution through ODL mode.**

- **Describe about the development and use of technological tools for teaching learning activities. Provide the details about the institutional efforts towards the blended learning.**

**In our institution, we have the facility to provide blended learning education to our students. We have Moodle Learning management System (LMS) through which students can access the learning materials, Students have the provision to submit their assignments attending Quiz etc.,**

**Describe any good practice/s of the institution pertaining to the Distance education/online education in view of NEP 2020.**

## Extended Profile

**1.Programme**

1.1 **12**

Number of programmes offered during the year:

| File Description | Documents |
|---|---|
| Institutional Data in Prescribed Format | [View File](#) |

**2.Student**

2.1 **2282**

Total number of students during the year:

| File Description | Documents |
|---|---|
| Institutional data in Prescribed format | [View File](#) |

2.2 **608**

Number of outgoing / final year students during the year:

| File Description | Documents |
|---|---|
| Institutional Data in Prescribed Format | [View File](#) |

2.3                                                                          **2282**

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                                                                          **519**

Number of courses in all programmes during the year:

| File Description | Documents |
|---|---|
| Institutional Data in Prescribed Format | [View File](#) |

3.2                                                                          **166**

Number of full-time teachers during the year:

## Extended Profile

### 1.Programme

| 1.1 | **12** |
|---|---|
| Number of programmes offered during the year: | |

| File Description | Documents |
|---|---|
| Institutional Data in Prescribed Format | View File |

### 2.Student

| 2.1 | **2282** |
|---|---|
| Total number of students during the year: | |

| File Description | Documents |
|---|---|
| Institutional data in Prescribed format | View File |

| 2.2 | **608** |
|---|---|
| Number of outgoing / final year students during the year: | |

| File Description | Documents |
|---|---|
| Institutional Data in Prescribed Format | View File |

| 2.3 | **2282** |
|---|---|
| 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 | **519** |
|---|---|
| Number of courses in all programmes during the year: | |

| File Description | Documents |
|---|---|
| Institutional Data in Prescribed Format | View File |

| 3.2 | **166** |
|---|---|

Number of full-time teachers during the year:

| File Description | Documents |
| --- | --- |
| Institutional Data in Prescribed Format | View File |

| | |
| --- | --- |
| 3.3<br><br>Number of sanctioned posts for the year: | **166** |

## 4.Institution

| | |
| --- | --- |
| 4.1<br><br>Number of seats earmarked for reserved categories as per GOI/State Government during the year: | **351** |
| 4.2<br><br>Total number of Classrooms and Seminar halls | **75** |
| 4.3<br><br>Total number of computers on campus for academic purposes | **1323** |
| 4.4<br><br>Total expenditure, excluding salary, during the year (INR in Lakhs): | **1144** |

# 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.

**7The curriculum is framed to meet the scope of employability / entrepreneurship for the benefit of our students and meet the needs of local, regional, national, and global Developments. Courses in the curriculum are framed by following the Programme Educational Objectives, Programme Outcomes, Programme Specific Outcomes and Course Outcomes. The course outcomes of various courses have been articulated based on internationally recognized Graduate attributes of Engineering. The course components are meticulously included to provide engineering knowledge with**

technical and soft skills and articulate ethical behavior. Courses are framed based on the initiatives, strategies and plans executed by the Government of India (Make in India, Digital India, Startup India, National Afforestation Programme, National River Conservation Plan, Atal Bhujal Yojana (ABHY), National Anticorruption Strategy, Udaan Scheme, Digiloker, Smart City Projects, National Health Mission, NitiAyog-National Strategy for Artificial Intelligence, Rashtriya Madhyamik Shiksha Abhiyan (RMSA), Integrated – Information and Communication Technology (ICT), Solar Charkha Mission, Ujwal Bharat, Swachh Bharat mission, Sagar Mala project, Pradhan Mantri Krishi Sinchayee Yojana, JaalSakthi, etc.,) to meet up the needs of local, regional, national and global development.

| File Description | Documents |
|---|---|
| Upload additional information, if any | [View File](View File) |
| Link for additional information | https://nec.edu.in/wp-content/uploads/2024/03/1.1.1.xlsx |

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

7

| File Description | Documents |
|---|---|
| Minutes of relevant Academic Council/BOS meeting | [View File](View File) |
| Details of syllabus revision during the year | [View File](View File) |
| Any additional information | No File Uploaded |

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

954

| 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 | No File Uploaded |
| Any additional information | No File Uploaded |

## 1.2 - Academic Flexibility

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

**89**

| File Description | Documents |
|---|---|
| Minutes of relevant Academic Council/BoS meetings | View File |
| Any additional information | No File Uploaded |
| 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

**12**

| File Description | Documents |
|---|---|
| Minutes of relevant Academic Council/BoS meetings | View File |
| Any additional information | No File Uploaded |
| 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

**Beyond technical aspects, the curriculum design and development**

has reasonably dedicated to sensitizing students by imparting socially, professionally, and ethically relevant issues as part of the curriculum for cultivating their personality traits.

Human values and Professional Ethics: All UG programmes have three credit mandatory courses on Professional Ethics and Human Values.

The courses like Project Management, Human Resource Management, Cyber Law and Ethics, Human Resource Development and Organizational Behavior, Industrial Psychology and Organizational Behavior, Personality Development through Life Enlightenment Skills, Value Education, Stress Management through Yoga practices are introduced.

Environment and Sustainability: The Environmental Science and Engineering course is introduced in all programmes. The courses like Safety, Health and Environmental Engineering, Renewable Energy Sources, Solar Photovoltaic Energy Conversion, Energy Conservation, and Waste Heat Recovery, Global Challenges and Issues, Sustainable Development and Practices are offered to maintain a healthy environment.

Gender: courses like Constitution of India, Women in Indian Society, Indian Culture and Heritage have been introduced as transdisciplinary courses. With the focus on the need to counsel the young minds, women empowerment cell is constituted to address the various issues faced by students in academic and personal life.

| 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 | No File Uploaded |

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

**45**

| File Description | Documents |
|---|---|
| List of value-added courses | View File |
| Brochure or any other document relating to value-added courses | **No File Uploaded** |
| Any additional information | **No File Uploaded** |

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

**1723**

| File Description | Documents |
|---|---|
| List of students enrolled | View File |
| Any additional information | **No File Uploaded** |

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

**1135**

| File Description | Documents |
|---|---|
| List of programmes and number of students undertaking field projects / internships / student projects | View File |
| Any additional information | **No File Uploaded** |

### 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://nec.edu.in/wp-content/uploads/2024/04/1.4.1-1.4.2-Feedback-System.pdf |
| Upload the Action Taken Report of the feedback as recorded by the Governing Council / Syndicate / Board of Management | View File |
| Any additional information | No File Uploaded |

| **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://nec.edu.in/wp-content/uploads/2024/04/1.4.1-1.4.2-Feedback-System.pdf |
| Any additional information | No File Uploaded |

## 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

569

| 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)

317

| 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.

Students from rural backgrounds and different vernacular mediums of instruction are identified, and suitable stream-based bridge courses are conducted right from the beginning of the academic year. An active mentor system allows identifying the varied academic needs and suggesting appropriate measures for both slow and advanced learners.

SPECIAL PROGRAMS FOR SLOW LEARNERS:

Bridge courses are conducted for second-year Lateral Entry Students on Mathematics and English related courses. Special coaching classes are arranged for the slow learners beyond the regular class schedule on specific days for each course.

SPECIAL PROGRAMS FOR ADVANCED LEARNERS:

In the academic year 2022-2023, 2621 students have registered for NPTEL courses, with 1963 completed certifications. Four hundred and Four students have received certificates in various courses through the IITB spoken tutorial scheme. Students are encouraged to organize various technical events and project competitions through different professional societies.

Advanced learners are highly motivated to take competitive exams such as GATE, TANCET, MAT, and CAT, and they are given coaching to help them succeed. Advanced students are encouraged to compete in National/International level coding competitions.

The "KR Innovation Centre", "Entrepreneur cell" and "Incubation Centre" helps to develop innovative ideas into a prototype and helping for patent and commercialisation.

| File Description | Documents |
|---|---|
| Upload any additional information | **No File Uploaded** |
| Paste link for additional information | [https://nec.edu.in/aqar-2022-2023/#](https://nec.edu.in/aqar-2022-2023/#) |

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

| Year | Number of Students | Number of Teachers |
|---|---|---|
| **31/05/2023** | **2282** | **166** |

| 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:

**Experimental Learning:**

- **Practical Courses- The curriculum is designed to provide students with hands-on experience in all courses to validate their theoretical knowledge.**
- **Internships and Internshala- As per regulation, each student must complete Industrial Training or Internships for a minimum period of four weeks.**
- **Industrial Projects/Industrial Visit Department and College level placement coordinators arrange industrial projects and Industrial visit for final year students with the guidance of industry experts.**

**Participative Learning :**

- **Active Learning- Active learning methods like role plays, group discussion, problem-solving, and case studies are suitably identified based on course content practiced in the classroom. Modern teaching pedagogy like Jigsaw, Mud cards, and Think Pair Share is being implemented to attract student participation.**
- **Blended Learning- Faculty members practice NEC-MOODLE based LMS systems to share recorded lectures and course materials,**

conduct assessment, and collect feedback and survey about teaching methods and attainment of course outcome.

**Problem-solving methodologies :**

- Problem-solving through Project-based learning- Students are encouraged to associate with faculty members to carry out Mini and Major project works in their areas of interest from the second year onwards.
- Engaging in research-oriented projects- Students actively involved in projects with faculty members and publishing papers in Scopus and SCI journals.

| File Description | Documents |
|---|---|
| Upload any additional information | No File Uploaded |
| Link for additional Information | https://nec.edu.in/wp-content/uploads/2024/04/2.3.1-correct.pdf |

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

NEC Moodle helped a lot in the teaching-learning process as well as assessment. The faculty members can post their recorded video lectures, e-books, PowerPoint presentations, and lecture notes. The students' views on the materials can also be ensured. The periodical assessment for each course outcome like Quiz, Active Quiz, and assignment is conducted through MOODLE.

Classrooms are equipped with smart monitors, and Laboratories have a Projector facility to handle live demonstrations during class and Laboratory sessions.

The Central Library provides excellent library facilities for all the students and faculty members, such as sufficient books and journals, attractive modern building with high-speed Wi-Fi connectivity, Web OPAC, web-based Library Automation, etc. It has the subscription of IEEE (ASPP) and Elsevier (Science Direct) online journals and Institutional members of DELNET, e- Shodh Sindhu, Shodganga, and NDLI Club.

e-Learning Management System (e-LMS) that customizes the content of NPTEL Videos and includes our college contents such as e-journals, e-books, and e-question banks, etc. The students,

**faculty, and research scholars access the e-resources and download the relevant and needed articles.**

**A firewall-restricted user-id-based Wi-Fi facility for internet access is provided on laptops and mobile devices for effective learning.**

| File Description | Documents |
|---|---|
| Provide link for webpage describing ICT enabled tools including online resources for effective teaching and learning process | https://nec.edu.in/wp-content/uploads/2024/03/2.3.2-Moodle-link-2022-23-.pdf |
| Upload any additional information | **No File Uploaded** |

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

**2.3.3.1 - Number of mentors**

**133**

| 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 | **No File Uploaded** |

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

**The Institute follows a strategy to prepare the academic calendar for every year well in advance before the commencement of classes. The calendar is designed in coordination with the Director, Principal, Heads of Departments, Association in-charges, Professional chapter in-charges, and various club in-charges. The academic activities include reopening of classes, course registrations, student induction programmes, class committee meetings, internal assessment test, conduction of placement training, conferences, seminar activities, examination time tables, academic audit, conduction of Board of Studies, Academic Council meetings, parents-teachers meeting and holidays are scheduled in the calendar.**

**Preparation of Teaching Plan**

The teaching plan is prepared by the faculty members handling the courses and uploaded in the for students' access. The teaching plan for a particular course contains

- Course outcomes
- Textbooks and reference books list
- Number of hours required for each topic
- Delivery method
- Assessment told to be followed for each course outcome
- CO and Internal mark evaluation Procedure
- Target and threshold percentage.
- Rubrics for Evaluation of Cognitive and Affective domain
- Mapping of Course Outcome (CO) with Programme Outcome (PO)

The Academic Audit committee verifies the course file whether activities are carried out as per the teaching plan at the end of the academic year.

| 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

**166**

| 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 | No File Uploaded |

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

**166**

| 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 | No File Uploaded |

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

1616

| File Description | Documents |
|---|---|
| List of teachers including their PAN, designation, Department and details of their experience | View File |
| Any additional information | No File Uploaded |

**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**

35

| 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 | **No File Uploaded** |
| Upload any additional information | **No File Uploaded** |

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

**In Continuous Internal Assessment, performance is evaluated by two internal examinations for theory courses and one model examination for the practical courses. In addition, various continuous assessments are conducted with appropriate weightage. For project work, three reviews are conducted.**

**In End Semester Examinations:**

**Questions are prepared for all the courses.**

**The examination schedule and instructions is prepared and disseminated.**

**Question papers are set by the subject experts and scrutinized.**

**External audit is conducted periodically.**

**Unbiased valuation is ensured through a dummy number system. Transparent evaluation system is also maintained by showing the answered scripts to the students before the processing of results.**

**Pre-Examination Process**

**It includes nominal roll preparation, course work registrations exam applications, question paper setting and scrutiny, practical exam, hall tickets, seating arrangements, invigilation duties, dummy numbering, and foil cards.**

**Post Examination Process**

**The End semester answer scripts are evaluated and Result Passing Board analyses and approves results. Grade sheets and consolidated mark statements are issued with various security features.**

**IMPACT**

**Integration of ICT has enhanced the quality of functioning of the CoE office and has resulted in quick publication of results.**

**Showing all the answer scripts of ESE to the students helps to achieve greater transparency**

| File Description | Documents |
| --- | --- |
| Upload any additional information | [View File](#) |
| Paste link for additional Information | [https://nec.edu.in/overview/](https://nec.edu.in/overview/) |

## 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

- **Outcome-Based Education (OBE) has been implemented in our Institute since 2013 as OBE emphasizes what is expected from the student when they finish their course. In line with OBE, Program Specific Outcomes (PSOs), Program Outcomes (Pos), and Course Outcomes (Cos) have evolved. OBE is mandatory in all regulating bodies like NBA and NAAC etc. OBE provides/helps the student to achieve the outcomes of significance before leaving the Institute**
- **The Program Outcomes (POs) and Course Outcomes (COs) are specifically stated for all the courses of the program published on the college website and also displayed at prominent places in the department such as classrooms, laboratory halls, seminar halls, faculty rooms, the entrance of the department and department library. Also, it is available in syllabus books, laboratory manuals, and course plans and also uploaded in the LMS portal. The course outcomes (COs) are given in the syllabus of every course. The syllabus also provides the mapping of COs with both POs and PSOs. The students are issued a course syllabus copy and course plan with COs.**
- **The vision, mission, POs, and COs are explained to first-year students and other stakeholders during the induction and orientation program.**

| File Description | Documents |
|---|---|
| Upload COs for all courses (exemplars from the Glossary) | [View File](#) |
| Upload any additional information | [View File](#) |
| Link for additional Information | Nil |

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

**Attainment of course outcomes**

The calculation of COs of a course is measured by both the direct and indirect assessment tools. Direct assessments are made from the performance in continuous internal assessments, assignments, tutorials, mini project and project work review, seminars, quizzes, Course exit survey, and end semester examination. Indirect assessment is made from the Course End Survey. The direct and indirect assessments are given 90% and 10% weightage, respectively. The Course Coordinator and Instructor frame the course end survey questions to indirectly find the student's confidence level in the COs.

**Attainment of program outcomes**

For direct attainment, all POs are adequately addressed through the selection of courses and their COs. Target levels of attainment of POs and PSOs are set, and the actual attainment of POs and PSOs are reviewed and determined by Department Advisory Board(DAB).

The indirect methods considered for calculating POs/PSOs are program exit survey, alumni survey, and employer survey. The survey questionnaires are given on a scale of scores ranging from 1 to 5, and they are mapped to appropriate POs and PSOs. The average score of the questionnaires is calculated as indirect attainment for the mapped POs and PSOs.

| File Description | Documents |
|---|---|
| Upload any additional information | **No File Uploaded** |
| Paste link for additional Information | https://nec.edu.in/aqar-2022-2023/ |

## 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

**607**

| 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 | nil |

## 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://nec.edu.in/wp-content/uploads/2024/03/2.7-Student-Satisfaction-Survey-2022-23.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

**National Engineering College(NEC) has a well-defined policy to promote research, consultancy and IPR. The promotion of the research and the research policies are discussed periodically in theGoverning board, Academic Council and research advisory board meetings. In support of our vision and to strengthen the quality of research and development in all our research centers, InstitutionResearch Fellowship Scheme is implemented exclusively for full-timePh.D. The institutional research fellowship of**

**Rs.10,000/- per monthis given to the full-time Ph.D. Scholars.The Institute offers fundsand on-duty for the faculty members to attend seminars, workshops,orientation programs, and refresher courses to update their existing knowledge and procure additional information.**

**The Institute encourages the faculty by providing incentives for peer-reviewed publications, sponsored research projects and consultancy. The Institute has a unique training program, "Industry Know How" for staff members to enrich their knowledge to get the consultancy from Industry. The Institute provides the full financial support to participate in the "Industry knows how" program. TheInstitute creates awareness about Intellectual Property Rights among faculty, researchers, and scholars. The Institute takes care of the patent filing process, which is governed by the Research policy of the Institute.**

| 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://nec.edu.in/wp-content/uploads/2023/10/rdpolicy-final.pdf |
| Any additional information | No File Uploaded |

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

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

**11.5**

| 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 | No File Uploaded |

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

0

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

**3.2 - Resource Mobilization for Research**

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

68.9

| 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 | No File Uploaded |

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

34

| File Description | Documents |
|---|---|
| Upload any additional information | **No File Uploaded** |
| Paste link for additional Information | **Nil** |
| List of research projects during the year | View File |

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

**47**

| 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

**6**

| File Description | Documents |
|---|---|
| Supporting document from Funding Agencies | View File |
| Paste link to funding agencies' website | https://www.nrsc.gov.in/Respond_Basket?language_content_entity=en, https://necnewgeniedc.in/ |
| 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.

**National Engineering College (NEC) has established a business incubator (NEC-BI) in the year 2015. NEC-BI is recognized byMinistry of MSME, New Delhi and purely devoted to all the innovators and entrepreneurs emerging from south India. Further, it has also established a special purpose vehicle K.R. Innovation**

Centre (KRIC),a section 8 company in the year 2018 to support the activities of business Incubation in our Institution. National Engineering College Allocates 1% of its total annual budget to accelerate the activities to support incubation in addition to the CSR funds to the worth ofRs 10, 00,000/-(Every Year).

Entrepreneurship Development Cell has been established in ourInstitute on 22.01.2015. NEC, ED Cell, is awarded the "NewGeneration Innovation & Entrepreneurship Development Centers (NewGenIEDCs)" scheme in 2017-2018 funded by NSTEDB & DST. The NEC NewGenIED centre is established in NEC and completed four academic years and thereby developed 65 numbers of commercially viable products.Forty five numbers of patents are filed from the outcomes of thesaid projects, and three student start-ups are created. Beyondproduct development, the centre actively functions by conducting various Entrepreneurship orientation programmes, entrepreneurship lecture series and encouraging the Techno-Entrepreneurial culture among the students.

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional information | https://necnewgeniedc.in/, http://www.necincubator.org/ |

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

18

| File Description | Documents |
|---|---|
| Report of the events | View File |
| List of workshops/seminars conducted during the year | View File |
| Any additional information | No File Uploaded |

**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 | A. All of the above |
|---|---|

**Ethics in the research methodology course work Plagiarism check through authenticated software**

| 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 | No File Uploaded |

**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**

**10**

| File Description | Documents |
|---|---|
| URL to the research page on HEI website | https://nec.edu.in/research/ |
| List of PhD scholars and details like name of the guide, title of thesis, and year of registration | View File |
| Any additional information | No File Uploaded |

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

**92**

| File Description | Documents |
|---|---|
| List of research papers by title, author, department, and year of publication | View File |
| Any additional information | No File Uploaded |

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

**124**

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional information | Nil |

## 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

**958**

| File Description | Documents |
|---|---|
| Any additional information | No File Uploaded |
| Bibiliometrics 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

**7**

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

## 3.5 - Consultancy

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

**1.55**

| 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 | **No File Uploaded** |

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

**1,55,731**

| 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 | **No File Uploaded** |
| Any additional information | **No File Uploaded** |

**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

**Rotract Club promotes service mind in the young blood of our students. This is a member unit of Rotary of Kovilpatti. Here the students are involved in various service activities that benefits the public. Voter ID integration with Aadhar, visit to blind school are some specific events that our students involved and rendered their service.All these mentioned activities have positive impact on the students and it developed student community relationship, leadership skill and self-confidence. It also helped in cultivating hidden personality of students and created awareness among them. Our College National Service Scheme(NSS) Units provide a variety of learning experiences which must develop**

a sense of participation, service and achievement:

Making education more relevant to the present situation to meet the felt needs of the community and supplement the education of the Schools/University/college students by bringing them face to face with the rural situation.

Providing opportunities to the students to play their role in planning and executing development projects which not only help in creating durable community assets in rural areas and urban slums but also results in the improvement of quality of life of the economically and socially weaker sections of the community.

| File Description | Documents |
|---|---|
| Upload any additional information | No File Uploaded |
| Paste link for additional information | https://nec.edu.in/student-affair/ |

**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**

14

| 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 | No File Uploaded |

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

249

| File Description | Documents |
|---|---|
| Reports of the events organized | View File |
| Any additional information | No File Uploaded |

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

**14650**

| File Description | Documents |
|---|---|
| Reports of the events | View File |
| Any additional information | **No File Uploaded** |

## 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

**436**

| File Description | Documents |
|---|---|
| Copies of documents highlighting collaboration | View File |
| Any additional information | **No File Uploaded** |

### 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)

**8**

| 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 | **No File Uploaded** |

## INFRASTRUCTURE AND LEARNING RESOURCES

## 4.1 - Physical Facilities

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

**The departments are functioning in separate blocks and each has more than the required numbers of classrooms are equipped with traditional chalkboards and about 90% are equipped with SmartTV, LCD Projectors, and quality audio systems with internet**

connectivity. Collarmics, stands for capturing live lectures, speakers,smart tabs,HD cameras, and headphones are available for handling onlineclasses.

Advance Computing facilities with computers,including the latest configuration systems with licensed and open-source software. Rack mounted bladeservers,Storage Area Networks,Cisco Routers,and Sonic Firewall are also available.The college has155 Mbps& 310Mbps Internet connectivity from Airtel, and Reliance.

It has 500KVA, 320KVA, and 200KVA powergenerators and also Solar Energy.Hostel accommodation for both male and female students is available halls.30 buses are available for transporting staff and students. Indian overseas Bank , ATM acility,TCPCell,Store for Stationeries,Canteen,Cafeteria,postoffice,dispensary for both boys and girls,reprographics centre,Various Forums/Clubs for co-curricular and extra-curricular activity,and Alumni Chamber with video conferencing facility.

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](#) |
| Paste link for additional information | Nil |

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

Adequate facilities are available for playing outdoor games, sports, gymnasium, yoga, and cultural activities.

The open playground is being used to conduct the games such as Football, Handball, Kabaddi, Tennis Courts, hockey, and Cricket fields. The students are trained to compete at the zonal, inter-zonal, state, and national levels. The Institution regularly organizes zonal level sports events such as Anna University Zone-18 Zonal cricket tournament, basketball Men Tournament, National level weight lifting, state-level chess tournament, and Women ball badminton tournament. In addition to this, the basketball court and cricket practice net facilities are available in the campus.

The gymnasium hall is housed exercise equipment, including 16 Station Multi-Gym, Motorized Tread Mill, and Smith Machine. Single

**station gyms are installed in hostels.**

**The auditorium is effectively utilized for yoga activities, and the meditation hall is also there on campus. The Institution conducts certification courses to the students.**

**The auditorium (with a seating capacity of 900) and seminar halls are utilized to conduct cultural programs. The students perform folk dances, banjara dances, music, plays, mono acting, traditional events like Silambam, Martial Arts, Etc. The students have participated in cultural competitions and won prizes.**

| File Description | Documents |
|---|---|
| Geotagged pictures | [View File](#) |
| Upload any additional information | [View File](#) |
| Paste link for additional information | **Nil** |

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

**42**

| 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)

**273.7**

| File Description | Documents |
|---|---|
| Upload audited utilization statements | [View File](#) |
| Details of Expenditure, excluding salary, during the years | [View File](#) |
| Any additional information | **No File Uploaded** |

**4.2 - Library as a Learning Resource**

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

The Library has a rich collection of 62,621 volumes of books and 25,086 titles, 110 National Journals and Technical Magazine, 3476 Back volumes, 6567 e-books, 3317 CDs, 5522 Project reports and 21 Newspapers (both English & Tamil).

The Central Library has the subscription of Science Direct - Engineering & Computer Science online journals, IEEE core collection of Engineering, Electronics and Computer Science online journals, EBSCO Engineering core collections of e-Books and Institutional members of DELNET, NDLI Club, e-ShodhSindhu and N-LIST.

Open Access System is being followed. In addition to the well-stocked departmental Library, each department has its Library to facilitate easy access for the Faculty, Students, Research Scholars.

Library Automation:

Central Library was automated in 1998 by using LIBASOFT and AutoLib Software in the year 2004. Currently, the NEC Library uses InsProPlus Integrated Library Management Software since August 2011.

Name of the ILMS Software : InsPro Plus

Nature of Automation (fully or partially) : Fully Automated

Version : Updated Version

Year of Automation : 1998 - Updated August 2011

InsProPlus Integrated Library Management Software has fully automated all the library services. InsPro Plus is web-based Library Automation software facilitates automated library system and services including e-Gate Register, Circulation, web OPAC etc.

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional information | http://erp.nec.edu.in/erp/Default_LoginPage.aspx |

**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)**

**24.10**

| File Description | Documents |
|---|---|
| Audited statements of accounts | View File |
| Any additional information | No File Uploaded |
| 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**

**671**

| File Description | Documents |
|---|---|
| Upload details of library usage by teachers and students | View File |
| Any additional information | No File Uploaded |

## 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 college has a well-established IT infrastructure and facilities and has been upgraded regularly depending on the necessity.

IT infrastructures:Computer Systems

- Core i7 : 153
- Core i5 : 914
- Core i3 : 11
- Dual Core : 293
- Server : 20

Peripherals

- Printers : 62
- Scanners : 10
- Xerox Machine : 26

155Mbps Airtel(1:1) and 310Mbps Reliance(1:1) leased line internet connectivity.

The entire campus is connected with fiber backbone, and internal blocks are connected with local area networks with 310Mbps (1:1) high-speed internet connectivity to all computer systems, Ruckus access points with Ruckus wireless controller (Zone Director3000), high-speed advanced servers such as IBMX3650M3,HP make of Domain servers, ERP Server, Linux Server, Web Servers and Moodle LMS Server, HPDL380Gen10 Fileserver, HPDL380 Gen9 server with 48TB storage capacities available in the college. SophosXG550firewall,WiFi coverage isused to provide secured internet access along with a monitoring system.

All faculty members provided with College Mail id(@nec.edu.in)

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](#) |
| Paste link for additional information | Nil |

## 4.3.2 - Student - Computer ratio

| Number of Students | Number of Computers |
|---|---|
| **2284** | **1324** |

| 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 | **No File Uploaded** |

| 4.3.4 - Institution has facilities for e-content development:               Facilities available for e-content development Media Centre Audio-Visual Centre Lecture Capturing System (LCS) Mixing equipments and software for editing | **C. Any two of the above** |
|---|---|

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](#) |
| Paste link for additional information | **Nil** |
| 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)

**306.4**

| File Description | Documents |
|---|---|
| Audited statements of accounts | [View File](#) |
| Upload any additional information | **No File Uploaded** |

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.

**National Engineering College has the infrastructure to provide its teaching, learning, and research programmes. The Institute has an established system for electrical maintenance and mechanical maintenance to utilize computers, classrooms, equipment, and laboratories on the college campus.**

**Physical facility:**

**The mechanical maintenance engineer maintains the physical facilities. Estate office, RO system, Furniture, Fire and safety, water management, plumbing, Sewage treatment system, and Gardening services taken care by his team. The electrical engineer is responsible for Electrical, Networking, system and peripherals, intercom, public addressing system, CCTV, and AC systems.**

**Classroom, Laboratory Maintenance:**

**Classroom furniture, teaching facility, and laboratories are maintained by the department faculty members and monitored by the respective department Head of the department.**

**Maintenance and Utilization of Seminar Halls and Auditorium:**

**The respective head of the department regularly monitors department seminar halls. Auditorium cleanliness is taken care of by the mechanical maintenance team.**

**Maintenance of Sports and Games Facility:**

**The sports equipment's, fitness equipment's, ground, and various courts are Monitored and maintained by the Physical Director.**

**E-waste Management Process:**

**The following unused items have been collected in department wise and sent it as E-Waste.**

- **Computers**

- **UPS & Batteries**

- **Xerox Machine and Printers**

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](#) |
| Paste link for additional information | **Nil** |

## STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

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

**671**

| 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

**19**

| 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** | **A. All of the above** |

| | |
|---|---|
| **Communication Skills Life Skills (Yoga, Physical fitness, Health and Hygiene) Awareness of Trends in Technology** | |

| File Description | Documents |
|---|---|
| Link to Institutional website | **Nil** |
| Details of capability development and schemes | [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**

**621**

| File Description | Documents |
|---|---|
| Any additional information | **No File Uploaded** |
| 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 | **No File Uploaded** |

## 5.2 - Student Progression

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

**621**

| File Description | Documents |
|---|---|
| Self-attested list of students placed | View File |
| Upload any additional information | **No File Uploaded** |

## 5.2.2 - Number of outgoing students progressing to higher education

**9**

| File Description | Documents |
|---|---|
| Upload supporting data for students/alumni | View File |
| Details of students who went for higher education | View File |
| Any additional information | **No File Uploaded** |

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

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

**13**

| 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

**5**

| File Description | Documents |
|---|---|
| e-copies of award letters and certificates | View File |
| Any additional information | **No File Uploaded** |

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

**Academic Council & Board of Studies**

**The student members are nominated across all the branches in the academic council and Board of studies meeting to express their views on enhancing new courses based on emerging trends. Accordingly, curricula and syllabi are refined.**

**Students are nominated as members of the anti-ragging committee.**

**Class committee comprises of student members, representing meritorious as well as mediocre students. The committee also involves the faculty members handling the courses and a faculty coordinator nominated by the HOD, other than the course instructors.**

**Every department has an advisory committee with all the stakeholders of the education system - the faculty, students, parents, and members from academia and industries. The discussions include the development of the student, their academic performance, placements, co-curricular and extra- curricular activities, and the overall development and continuous improvement of the respective department.**

**Hostel committees are framed as mess committee - to prepare the**

menu items; computer lab committee – for the active usage of ICT facilities; Gym committee- to foresee their fitness development.

IQAC has representatives of student members to share their views while framing the quality policies and special initiatives that were taken to improve the teaching, learning process.

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional information | Nil |

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

**7**

| File Description | Documents |
|---|---|
| Report of the event | No File Uploaded |
| 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

Alumni association has established as a society on 01.06.2006, with various regional chapters globally, with the parent chapter functioning at Kovilpatti. The alumni association functions actively, with 13,161 members enrolled till date. The alumni chapters are established at Chennai, Coimbatore, Bangalore, Kuwait, Singapore, Europe, and USA. An annual general body meeting is convened every year to discuss the activities and progress of the association. The president heads the association, and the other office-bearers like secretary, Treasurer, Vice president, Joint treasurer, and Joint secretary are also present during the meeting. An Alumni Chamber is established with a world-class audio/video conference facility with 200 seating capacity on the campus. Mobile app was also developed, and it helps the alumni as well as students through the Alumni association in hand. The alumni association also contributes financially to the welfare of

the down-trodden students. Alumni from industry also act as members in the Department advisory committee, Board of studies, etc., for the refinement of Curricula and syllabi. Few of our alumni also serve as Adjunct faculty and create exposure towards Industrial activities. The alumni association supports the student's placement and training activities through conducting mock interviews.

| File Description | Documents |
|---|---|
| Upload any additional information | No File Uploaded |
| Paste link for additional Information | https://alumni.nec.edu.in/ |

| 5.4.2 - Alumni's financial contribution during the year | D. 2 Lakhs - 5 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

The Institution's mission exhibits the clarity to attain the goal of vision through various aspects ethically. Institutional policies, strategies, and quality assurance set the direction for achieving superiority in academics, research, infrastructure, faculty improvement, placement, social activities, etc. Systematic governance of the organization guarantees powerful management in administering the organization with transparency. The management policies encourage participative management to involve diverse stakeholders in suitable bodies for making decisions. Members of the management board consist of UGC nominees, State Government nominees, University nominees, Academic professionals, and Industry specialists. The affiliating University nominates its contributors to the Board of Management, Academic Council, Board of Studies, and Result passing board. Alumni and student nominees are also involved in the above bodies and share their views and ideas in the decision-making process. Faculty members share their views in designing the curriculum and syllabus allied with the graduate attributes defined by NBA to retain standards in

academics and research to achieve the institution's vision and mission. We established a positive environment that impacts team learning to provide higher-level training, including theory and practice with social and human values through the constant facilities and care.

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](View File) |
| Paste link for additional Information | https://nec.edu.in/about-us/ |

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

Our Institution operates in a decentralized manner with transparent mechanisms. Well-defined regulations and procedures have been framed to promote transparency in academic, scientific and administrative activities. The finance committee of the Institution makes financial decisions. The Board of Management takes policy decisions, formulates and amends rules and regulations, strategy planning, the delegation of powers and responsibilities. Our Institution's aim to develop technologically proficient employees with the attitudes, skill sets, knowledge, and ability to be creative and inventive. To fulfill the same, along with regular academic activities research and extension activities, other cocurricular and extra-curricular activities are planned and executed by various cells/forums/administrative setups.

CASE STUDY: PARTICIPATIVE MANAGEMENT

During the Parent-Teachers' association meeting, few parents requested to expose the company specific knowledge to the student within campus. Management has accepted parents' request and started to open technobation centres namely NEC-Mistral and NEC – Brimma Technology within the campus.

The objectives for establishing the technobation centers in our college are:

1. To promote a culture of innovation and creative problem-solving skills

2. To promote knowledge sharing and collaboration amongst

**industry, academia, government Institutions, research laboratories, etc.**

**3. To facilitate interdisciplinary design-focused education, research and entrepreneurial activities to create commercial opportunities and build partnerships between academics and industry.**

| 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://nec.edu.in/aqar-2022-2023/](https://nec.edu.in/aqar-2022-2023/) |

## 6.2 - Strategy Development and Deployment

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

**Strategic planning has been initiated with a long-term viewpoint to accomplish the vision and mission of the Institution. The main focus of the institution strategic plan includes higher placement, expansion of recent trends programme/course both in UG and PG, industry-ready curriculum, industry-institute interaction, student's internship, student's publication, faculty skill upgradation/enhancement, creation of student innovation products, magnification of appropriate recent equipment's in the laboratory for both students and faculties, well-equipped infrastructure for research and development activities. Placement training cell plays a major role in shaping the career goals of the students. Training the students and equipping them with skills and core knowledge has become an important responsibility. Every year, all the specific topics and tricks required for facing the campus interview have been taught, and a corresponding assessment has been conducted. These caused an increase in the headcount of placed students, and the number of offers also increased. In continuation to that, the training programs like career counseling sessions by experts, resume preparation, Mock interview, and skill development have been conducted every year to increase the placement count. In the academic year 2022 -2023 totally, 469students got placed and 612 offers in reputed companies.**

| File Description | Documents |
|---|---|
| Strategic Plan and deployment documents on the website | [View File](#) |
| Paste link for additional information | **Nil** |
| 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.

**I) Administrative Setup**

**Members from the governing board committee formulate principles and policies for teaching and non-teaching faculties. It also indicates and authorizes a new UG/PG program and an additional intake in the existing programs under the autonomous stream. Various committees have been initiated to achieve the vision and mission of the college by achieving short-term and long-term goals. Committee members of the college frequently interacted with the Director and the Principal of the college regarding academic and other activities inside the campus. The college has well-framed statutory and non-statutory committees for looking after the academic and administrative procedures. The statutory committees are constituted as per the guidelines of the UGC. The college examinations are conducted and administrated by the Controller of examinations assisted by one Deputy and Assistant Controller of examinations. The departments are led by the heads of the departments, who take care of academic and administrative tasks with the help of faculty members. 14 Nonstatutory committees are headed by the senior faculty members, consisting of members at various levels. The non-academic administrative tasks are executed by the Administrative Manager and the HR manager housed in the Principal's office along with clerical, programming, data entry, and other administration staff.**

| File Description | Documents |
|---|---|
| Paste link to Organogram on the institution webpage | https://nec.edu.in/wp-content/uploads/2024/03/6.2.2-Institution-Organogram-signed.pdf |
| Upload any additional information | View File |
| Paste link for additional Information | https://nec.edu.in/wp-content/uploads/2024/03/6.2.2.HR-Manual.pdf |

| **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 | **No File Uploaded** |

## 6.3 - Faculty Empowerment Strategies

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

**The institute has effective welfare measures for both teaching and nonteaching staff members. The following monetary and non-monetary welfare measures for personal and professional growth are provided to the staff.**

**Employees Provident Fund (EPF)**

**ESI facility for Non-teaching staff**

**Staff Gratuity**

**Group Insurance**

**Medical Claim Policy**

Sponsoring for Higher Education/Research by the grant of leave/lien.

Casual, Earned, Vacation and Medical leave

Maternity Leave to female employees

On-duty leave for attending FDPs / Conferences/Workshops/etc...

Financial support for attending conferences/workshop/seminar

Incentives for publications in peer-reviewed journals Incentives for NPTEL Gold Medalist

Free transport to teaching and non-teaching staff

Free Hostel Accommodation facility Sports and Gym facilities.

Canteen Facilities

Separate Dining Hall for faculties

Indian Overseas Bank branch with ATM facility on the campus.

Staff Club - Annual picnic, festival gift, and annual gift for staff Festival advance Staff Quarters

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](View File) |
| Paste link for additional information | https://nec.edu.in/wp-content/uploads/2024/03/6.3.1.Staff-welfare-Proof.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**

15

| File Description | Documents |
|---|---|
| Upload any additional information | **No File Uploaded** |
| 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

**18**

| File Description | Documents |
|---|---|
| Reports of the Human Resource Development Centres (UGC HRDC/ASC or other relevant centres) | View File |
| Upload any additional information | **No File Uploaded** |

### 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.)

**157**

| 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 | **No File Uploaded** |

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly

**A financial committee has been constituted twice a year to allocate funds for various activities and it is sited before the Governing Council for approval. At the end of the financial year, the overall account details are audited by a charted audited accountant the utilization and execution of the budget are monitored through the finance committee and external audit.**

Finance Committee meeting is held half-yearly basis, and external audit is carried out annually by an Auditor (charted accountant) at the end of every financial year. Financial planning and review are done regularly by the Finance Committee. Finance Committee meets twice a year and reviews the fund utilization of each department and college and suggests further action plans. Depending on the demand and requirement, the finance committee allows spending more than the money allocated in the budget. The respective government auditors audit the received government funds through verification of documents and the disbursal of the scholarships such as post metric scholarships, backward community scholarships, and firstgeneration graduate scholarships to the students. The financial section of the college maintains the record of every online financial transaction.

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional information | https://nec.edu.in/audited-statements/ |

**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

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

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

National Engineering College is a self-financed institution, where the funds are generated through the fees paid by the students. The discrepancy is adjusted by taking advance from the parent trust. These funds are utilized for research and laboratory development. The institute has a well-defined mechanism to monitor the effective and efficient utilization of available financial resources to develop academic processes and infrastructure development. Optimal Utilization of funds and resources are

ensured through induction and orientation Programs, workshops, inter-disciplinary activities, training programs, Refresher Courses, Faculty Development Programs, Conferences, Industry-Academia interactions that ensure quality education. The institutional budget is prepared by the Principal every year, considering both recurring and non-recurring expenditures. All the administrative and academic heads are requested to submit the budget required for the subsequent financial year. Along with this, all coordinators of different cells viz., R& D Cell, Exam Cell, T&P Cell, NSS Cell, etc., are instructed to submit their budget to the Principal. The Institute's Local Managing Committee and Governing Body (GB) take all the major financial decisions.

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional Information | https://nec.edu.in/finance-committee-meeting-minutes/ |

## 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)

Our institution established the IQAC on 10.06.2013, which has an external peer team to assess the performance of the college.

Practice 1 : Merit Scholarship:

Kalvithanthai Thiru K. Ramasamy Memorial Merit Scholarship: In memory of Kalvithanthai Thiru K. Ramasamy, the founder chairman of National Engineering College, Kovilpatti, the Scholarships are offered to the deserving students for Merit, Talent, Sports, Innovation, Entrepreneurship and Research in undergraduate, postgraduate, and Ph.D. degree programmes. This scholarship is offered in the form of fee waiver, stipend, and fellowship.

Practice 2: Technobation Center:

NEC-Mistral Technobation center and Brimma Technobation Center have been established in our campus to provide industrial exposure to the students. The objective is to transfer knowledge and

employability skills to the students. NEC provides the required infrastructure, including a building, hardware lab, conference room, cafeteria, training room, manager room, server & UPS room, PCB rework room, and store room, and shall have a fully furnished facility with Internet, uninterrupted power supply, and water facility to setup technobation centers at NEC campus.

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](#) |
| Paste link for additional information | [https://nec.edu.in/iqac/](https://nec.edu.in/iqac/) |

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

Our college reviews the teaching-learning process, structures, methodologies, and learning outcomes at periodic intervals. To ensure the quality of the teaching-learning process, the class committee meeting is conducted three times a semester. Student representatives and all course handling faculties will be members of this committee. The Class committee chair interacts with the student representatives based on the schedule to learn about the teaching and learning process and its implementation. Corrective measures will be taken based on the student's feedback, if required. Learning outcomes are audited and measured periodically to certify their quality, and a corrective mechanism is implemented where necessary through the moderation committee. The shortfalls identified are addressed from time to time through this moderation committee. Some measures include submitting course handouts, monitoring course delivery and assessment, remedial actions for slow learners, the timely conduct of project reviews, compliance with academic calendars and regulations, and a uniform course delivery and evaluation system for multi-section courses. At the end of every semester, the faculty development section conducts a concluding audit to review the complete academic progress with the help of the academic audit committee. Every semester, this audit is carried out to certify the quality of the teaching-learning process and assessment done by faculty for the courses handled in the specific semester.

| File Description | Documents |
|---|---|
| Upload any additional information | View File |
| Paste link for additional information | https://nec.edu.in/about-fds/ |

| 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) | A. Any 4 or all of the above |
|---|---|

| File Description | Documents |
|---|---|
| Paste the web link of annual reports of the Institution | https://nec.edu.in/aqar-2022-2023/ |
| 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

**National Engineering College stands out in terms of gender equity. The Institute confirms that women actively participate and contribute to all of its characteristic moves, such as leading and making decisions. National Engineering College has a Women Empowerment Cell. This cell's primary goal is to promote and empower women to prioritise self-esteem, women's autonomy, and equity. This cell arranges outreach activities for both boys and girls. Two separate wings of NCC functioning in our Institution. The National Cadet Corps (NCC) Army Wing, under the affiliation of 3(TN) Girls BN NCC, Tirunelveli, was approved and started on 9th August 2016 with the sanctioned strength of 104 girls cadets 3(TN)**

Girls BN NCC.

**A. Safety and Security:**

To promote safety and security, the Institute maintains 24/7 CCTV surveillance on campus.Security officers are present at all key entry/exit gates and strategic positions throughout the campus around the clock.

The Institute has a mechanism of giving counselling to address both personal and academic issues of the students. Departments are also mandated to have regular student-faculty interaction meetings to identify the problems and resolve them.

| File Description | Documents |
|---|---|
| Upload any additional information | [View File](#) |
| Paste link for additional Information | https://nec.edu.in/wp-content/uploads/2024/03/7.1.1.pdf |

| **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** | C. Any 2 of the above |
|---|---|

| 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)

The institution had taken several steps to maintain a green environment. A system for solid/liquid waste management is in place through recycling and other means, among other steps such as planting more trees, encouraging bicycling, E scooters, and constructing additional solar power plants. These bins are colour coded specific to a category of solid waste, viz:

Green –Biodegradable, organic waste like cooked food, vegetables, fruit, leaves, etc.

**Red –Non-degradable waste like glass, blades, expired medicine, bandages, etc.**

**Electronically Operated Sanitary Waste Incinerator Plant:**

**The inappropriate disposal of sanitary napkins is a problem that requires immediate attention in order to improve hygiene. Incineration of sanitary napkins using electrical or physical fire-based incinerators without allowing the smoke generated in the process to escape into the atmosphere is one of the finest ways to dispose of menstrual waste. Napkins must be burnt as soon as they are used to prevent infections from growing on them.**

**Sewage Water Treatment:**

**Sewage Treatment Plants (STP) with 1,50,000 Ltr capacity (Estd: 2017) at a cost of Rs.12.0 Lakhs. Sewage water, Urinal waste, Toilet waste and Waste water from all the blocks are collected and pumped in to STP through pipelines.**

| 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** | **A. Any 4 or all of the above** |
|---|---|

| 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** | **A. Any 4 or All of the above** |
|---|---|

**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 | **No File Uploaded** |

## 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: <br><br> 1. Green audit <br> 2. Energy audit <br> 3. Environment audit <br> 4. Clean and green campus recognitions/awards <br> 5. Beyond the campus environmental promotional activities | **B. Any 3 of the above** |
|---|---|

| File Description | Documents |
|---|---|
| Reports on environment and energy audits submitted by the auditing agency | View File |
| Certification by the auditing agency | **No File Uploaded** |
| Certificates of the awards received | **No File Uploaded** |
| Any other relevant information | View File |

| **7.1.7 - The Institution has a disabled-friendly** | **B. Any 3 of the above** |
|---|---|

**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 | **No File Uploaded** |
| 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).

**Our members adhere to their religious beliefs without any hindrance. Our College adorns a festive look to celebrate Pongal, the regional festival of the state Tamilnadu. Many competitions such as Rangoli, Debate, Bharatham, Orchestra, and dance events display the Students' enthusiasm and teamwork. Themes based on the role of agriculture are chosen for the Rangoli competition. Many departments such as nutrition, physical education, and human resources department work in collaboration for the benefit of the Institution and conduct various contests for the faculties and students on the campus. Individual departments and committees perform Saraswathi Pooja/Ayudha pooja in their respective laboratories, unit's lab equipment, and books, invoking the blessings of the Almighty. Employees cutting across all faiths take part in these celebrations, and Prasad is distributed. Yoga day is celebrated every year. Yoga and meditation for women are taking place on the campus. The student's cultural program has the theme of communal and inter-religious harmony.**

| 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:

**One of the primary missions of our College is to serve society at large. Hence various initiatives have been implemented to imbibe a sense of social responsibility. Students and employees of the Institution have been actively engaged in many environmental welfare measures, philanthropic activities, NSS tasks, and health camps. Various community projects on Health care, Sanitation, and Environmental Protection have been implemented under NSS (Ministry of Youth and Sports, Govt. of India.), Swachh Bharat, and Unnat Bharat Abhiyan (Ministry of Human Resource Development, Govt. of India).These social activities have multidimensional effects on the student community. Our college NSS club volunteers used to visit the rural villages every year. They will stay in the village for about two weeks, carry out cleaning works, and be involved in other social service activities. Our college YRC club volunteers used to arrange blood donation camps every year, and all the volunteers donated the blood. Associating with the NSS volunteers, free eye check up camps have been arranged by the YRC club members.**

| 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** | **B. Any 3 of the above** |

**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

**Our Institution organizes national and international commemorative days and celebrates festivals like Pongal in the form of Samathuva pongal. In addition to that, our Institution also celebrates the birth and death anniversaries of great Indian personalities like Mahatma Gandhi (Gandhi Jeyanthi), Teachers day (Dr. Radhakrishnan Birthday), and Engineers day (Mokshagundam Visvesvaraya) every year.**

| 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 | **No File Uploaded** |

## 7.2 - Best Practices

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

**Demonstration with models and software's Demonstration often**

occurs when students have a hard time connecting theories to actual practice or when students are unable to understand applications of theories Videos and Animations

Educational animations are animations produced for the specific purpose of fostering learning. It is associated with educational technology with the way it supports teaching and learning through the use of technological tools to facilitate learning and to improve performance

1. Title of the Practice

Scheduling appropriate academic planning of every student based on their competency level and making them achieve their career objectives

2. Objectives of the Practice

- To motivate and guide the students in all academic aspects.
- To make the students identify and fix their dream company, either a Core or a Software Company.
- To motivate the students who are interested in the Government sector and higher studies.
- To identify the students' ability towards their goal and make them contribute in all activities like competitions, technical contests, internships, etc.
- To make students recognize their strengths and weaknesses and to take appropriate corrective action.

| File Description | Documents |
|---|---|
| Best practices in the Institutional website | **Nil** |
| Any other relevant information | https://nec.edu.in/innovative-teaching-and-learning-process/ |

## 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)

For maintaining the campus as pollution free and environmental friendly, students and faculty members are given awareness and motivated to use bicycles and e-vehicles inside and outside the campus. The pathways throughout the college campus are constructed

in a better way so that students, faculty members and sweepers can use them without congestion. The roads inside the institutions are pedestrian pathway on both sides. The roads are made up of paver blocks. The campus is made plastic free. Awareness on the reduction of plastic usages has been created to both students and staff through various forums. Awareness posters are prominently displayed in the key locations of the campus. Separate dust bins are maintained in all main places of the campus to collect plastic wastes. All the buildings of our college are surrounded by plenty of trees and flowering plants. Plants are grown in both the sides of the roads to make the entire college campus as an environmental friendly place. Leaf litters are removed under the trees everyday by sweepers to maintain the campus clean and healthy. There are 3334 numerous species of trees and different types of plants inside the campus. Each year through various forums trees are planted.

| File Description | Documents |
|---|---|
| Appropriate link in the institutional website | https://nec.edu.in/wp-content/uploads/2024/03/7.1.3.1.pdf |
| Any other relevant information | No File Uploaded |

7.3.2 - Plan of action for the next academic year

1. To strive for quality teaching, research and extension services
2. To achieve overall development of students and society
3. To incorporate flexibility in curriculum design
4. To adopt dynamic students evaluation system
5. To introduce regional need based courses
6. To make the system responsive for maintaining the time schedule
7. To develop strong relations with industries, institutes and society
8. To nurture industrial development based on regional resources
9. To create, preserve and disseminate technical knowledge
10. To promote competitive merit and excellence as the sole guiding criterion in overall development of students
11. To uplift the society by addressing the local and regional technical needs