

# YEARLY STATUS REPORT - 2022-2023

# Part A

# Data of the Institution

1.Name of the Institution	Netaji Subhash Engineering College
• Name of the Head of the institution	Prof. (Dr.) Amal K Ghosh
• Designation	Principal
• Does the institution function from its own campus?	Yes
• Phone no./Alternate phone no.	03324364929
• Mobile no	9433342760
• Registered e-mail	naac.nsec@gmail.com
• Alternate e-mail	principal@nsec.ac.in
• Address	Techno City, Garia
• City/Town	Kolkata
• State/UT	West Bengal
• Pin Code	700152
2.Institutional status	
Affiliated /Constituent	Affiliated
• Type of Institution	Co-education

• Location Semi-Urban

Financial Status	Self-financing
• Name of the Affiliating University	Maulana Abul Kalam Azad Universtiy of Technology (MAKAUT)
• Name of the IQAC Coordinator	Prof. (Dr.) Sukumar Roy
• Phone No.	03324364929
• Alternate phone No.	03324361285
• Mobile	9433408287
• IQAC e-mail address	coordinator.iqac@nsec.ac.in
• Alternate Email address	sroybme@gmail.com
3.Website address (Web link of the AQAR (Previous Academic Year)	<u>https://nsec.ac.in/page.php?id=51</u> <u>2</u>
4.Whether Academic Calendar prepared during the year?	Yes
• if yes, whether it is uploaded in the Institutional website Web link:	https://nsec.ac.in/circular/2022- 23_Academic_Calendar.pdf

## **5.Accreditation Details**

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B+	2.52	2019	28/03/2019	27/03/2024

# 6.Date of Establishment of IQAC

12/06/2013

7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Depa rtment /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Netaji Subhash Engineering College	MoE Innovation Cell	Govt. of India	2022	1.0 Lakh
Netaji Subhash Engineering College	MoE Innovation Cell	Govt. of India	2021	1.0 Lakh
Netaji Subhash Engineering College	UBA Grant	MHRD	2020	0.5 Lakh
Electrical Engineering Dept., NSEC	MODROBS	AICTE	2019	14.75 Lakh
Dr. Swapna Roy, EE, NSEC	Seminar Grant	AICTE	2017	1 Lakh
Biomedical Engineering Dept., NSEC	MODROBS	AICTE	2017	3.6 Lakh
Electronics & Communicatio n Engineering Dept., NSEC	MODROBS	AICTE	2017	9.6 Lakh
Dr. Sukumar Roy, BME, NSEC	Research Promotion Scheme	DST, WB	2012	5.33 Lakh
Dr. Sudipta Nath, EE, NSEC	Career Award	AICTE	2009	10.5 Lakh
Dr. Sudipta Nath, EE, NSEC	Young Scientist	DST	2008	3.0 Lakh

Dr. Partha Pratim Bhattacharya , ECE, NSEC	Fast Track Career Young Scientist Scheme	SERC, DST	2008	5.82 Lakh
Dr. Partha Pratim Bhattacharya , ECE, NSEC	Research Promotion Scheme	AICTE	2006	2.0 Lakh
Netaji Subhash Engineering College	TEQIP-I	World Bank	2005	747.8 Lakh

# 8.Whether composition of IQAC as per latest Yes NAAC guidelines

 Upload latest notification of formation of <u>View File</u> IQAC

#### 9.No. of IQAC meetings held during the year 03

- Were the minutes of IQAC meeting(s) and Yes compliance to the decisions have been uploaded on the institutional website?
- If No, please upload the minutes of the No File Uploaded meeting(s) and Action Taken Report

# **10.Whether IQAC received funding from any No** of the funding agency to support its activities during the year?

• If yes, mention the amount

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

IEEE MTT Student Branch Chapter (SBC) received a grant of USD 1500 from the MTT Society. Additionally, student members have received travel grants, registration fees, accommodation, and awards with cash. The IEEE Kolkata Section and IEEE AP-MTT Kolkata Chapter financially sponsored all IEEE events. Received Best Paper Award on all tracks in IEEE WAMS 2023, Gandhinagar, Gujarat by PhD student Anirban Chatterjee and his supervisor Dr. Koushik Dutta. The first author Mr. Anirban Chatterjee has received a cash prize of Rs 15,000 along with travel grants and free accommodation.

Through MoU with NIELIT Kolkata - an autonomous scientific society under MeitY GOI, eleven faculty members were trained in Training of Trainers (ToT) programs for Introduction to Blockchain Technology and mentored 187 students enrolled in a blockchain technology certification course.

Under the students' innovative project competition, Team Buzz and Team Powercon Technology won the IITF best start-up award in the "Future Entrepreneur" and "Innovation of the Year" categories organized by BNCCI. Team PowerCon with their product Energy Saver bagged the title of WINNERS at Shark Pool Season 2 at Amiphoria 2k23 organized by Amity University Kolkata.

The institute secured 4th position in the prestigious General Championship (GC) challenge in Cognizance 2023 organized by IIT Roorkee. Abhijit Ray, 1st year student of Electrical Engineering bagged the bronze medal at the 39th National Kyorugi and 12th POOMSE National Taekwondo championship at Vishakhapatnam.

**12.Plan of action chalked out by the IQAC in 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
Strengthening facilities for digital teaching learning and surveillance.	A total of fifty five classrooms and laboratories are equipped with ICT facilities for digital teaching learning. Online learning facilities (on-campus & off-campus) including NPTEL course materials, e-journals, e- books and library book renewal has been implemented. Additionally, two hundred twelve number of close circuit cameras including CCTV and display have been installed in the classrooms, laboratory and important areas in the campus for a safe, secure and conducive learning environment for all.
Promoting interdisciplinary research and to seek sponsored projects.	Faculty members assigned problem- centric projects to the students in healthcare, renewable energy, AI, ML, cyber security field and guided students to participate in innovation completion, Hackathon, prototype competition. Institute provided financial support to the students for the innovative competitions. Several faculty members registered as Ph.D. guide and involved in collaborative research with other university. Three proposals have been submitted for funding: SERB-Core Research Grant, SERB-SUPRA & CSIR-ASPIRE.
Emphasis on more research paper publications and patent.	Faculty members published thirty six research papers in UGC notified journals, eleven in other national and international journal. Twelve papers have been published with students. Thirty book chapters and thirty three papers published in national and

	international conference. One research paper awarded as best paper award on all tracks in IEEE WAMS 2023, Gandhinagar, Gujarat. One patent has been published and two under process.
Achieve NBA accreditation of few B.Tech programs	NBA accreditation for four undergraduate programs viz. Biomedical Engineering, Computer Science & Engineering, Electronics & Communication Engineering, and Electrical Engineering were initiated. The pre-qualifiers were submitted on 31/01/2023 and self-assessment reports were uploaded in NBA portal on 31/03/2023.
Synergize the activities of IIC as mentor institute under mentor- mentee programme by MoE's Innovation Cell.	Faculty members and students of IIC-NSEC have attended the Regional Meet of Institution's Innovation Council, organized by Ministry of Education's Innovation Cell and AICTE at GNIT. Innovation Day 2022 was celebrated with an invited talk on INNOVATION AND ENGINEERING by Mr Sanjay Kumar Das, State Information Security Officer and Joint Secretary, Dept of IT & Electronics, Government of West Bengal. Organize a Workshop on "Learning Agility in the Digital Age" - An Industry Academia Interface with HR Learning Network.
Arrange awareness programs, workshops, e-summit, Hult Prize competition, etc. under IIC & EDC.	The Entrepreneurship and Development Cell in association with the IIC organized "Cine-B- Plan" a unique business plan competition where participants pitched their unique business ideas inspired from movies. Arranged workshop on "Innovation and Entrepreneurship as a Career

	Opportunity" keynote speaker Mr. Subhabrata Banerjee, Senior Program Manager, National Entrepreneurship Network. Organized "INFERNO" On-Campus Business Fest & Panel Discussion On
Stress to be imparted for innovative projects by students mentored by faculty members and in turn NSEC will become Innovation Hub.	Faculty members mentored thirty students' innovative projects and participated in Hackathons and innovative competitions. One team was selected in SIH for grand finale, team "Buzz" & Team "Powercon Technology" winning the IITF best startup award in the
Increase activities of IEEE students' chapters and CSR programs through Rotaract-NSEC.	The institute opened fourteen IEEE student branches and branch chapters under different societies and organized twenty- four events in collaboration with industries and academic institutions. A USD 1500 grant was received by MTT SBC from the MTT society. Additionally, students received awards, travel grants, registration fees for conferences, free accommodation and travel for workshops, and best paper awards with cash. Students have published research papers in peer-reviewed journals and conferences with the help of the student branch. NSEC- Rotaract Club arranged fourteen outreach community programs.
Introduce skill-based competitive coding by external experts in regular time table.	Coding classes were adhered in the regular time table for the entire 2nd year students with the aim to develop the problem- solving skills through coding, and the usage of shortcut techniques and libraries to perform better in timed

	competitive situations. The course was catered through external agency Academy of Skill Development and internal faculty members. The skill-based competitive coding on C++, Python and Java was implemented in different batches based on learners with basic knowledge of programming with low confidence, intermediate knowledge of programming with average confidence and good knowledge of programming with high confidence. The GNX society in association with the Department of CSE hosted a two day long IOT Workshop integrated with competitive coding contest.
Collaboration with TCS for the comprehensive academia interface programmes and NASSCOM for implementation of technological and soft skill development programmes under future prime skill.	TCS Academic Interface Program (TCS-AIP) is a comprehensive high-quality academic program between TCS and NSEC, two interactive sessions have been arranged and 230 students participated in the programs. An MoU has been signed with NIELIT Kolkata-an autonomous scientific society under MeitY GOI and a Lead Resource Centre of Future Skill Prime project on Blockchain Technology for conducting a Bridge course training program on Blockchain Technology under NASSCOM. Eleven faculty members were trained in Training of Trainers (ToT) programs for Introduction to Blockchain Technology and mentored 187 students enrolled in a blockchain technology certification course. The college has come into collaboration with Accenture for imparting training on Japanese

	language to our students. A total of around 150 students have been shortlisted.
Arrange FDP, seminar, conference, workshops, invited talk and webinars.	Nine professional development programs and five seminars were organized by IEEE branch chapters. The CSE department organized a seminar on "Quantum Intelligence" and five workshops by ME and CE departments on "Exploring opportunities in higher studies". GNX society arranged one webinar on "XAI and its significance in today's world" by a senior scientist of TCS. An awareness program was organized jointly with NIELIT Kolkata on "Blockchain Technology". Google developer students chapter organized online and offline workshops on Android development. Internal hackathons, start-ups, and innovation competitions were organized by IIC.
<pre>Initiative for MOUs with academic institute and industry to offer certificate courses, internship, collaborative projects, papers, faculty / students exchange, etc.</pre>	Four MoUs have been signed during the year: 1. National Institute of Electronics & Information Technology (NIELIT) Kolkata, an Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India, for mentoring certificate course on Blockchain Technology, 2. Sun Eco Tech Ventures Pvt. Ltd., a

# 13.Whether the AQAR was placed before statutory body?

Yes

• Name of the statutory body

Name	Date of meeting(s)
BOG	06/02/2024

# 14.Whether institutional data submitted to AISHE

Part A Data of the Institution		
• Name of the Head of the institution	Prof. (Dr.) Amal K Ghosh	
• Designation	Principal	
• Does the institution function from its own campus?	Yes	
• Phone no./Alternate phone no.	03324364929	
Mobile no	9433342760	
• Registered e-mail	naac.nsec@gmail.com	
• Alternate e-mail	principal@nsec.ac.in	
• Address	Techno City, Garia	
• City/Town	Kolkata	
• State/UT	West Bengal	
• Pin Code	700152	
nstitutional status		
Affiliated /Constituent	Affiliated	
• Type of Institution	Co-education	
• Location	Semi-Urban	
Financial Status	Self-financing	
• Name of the Affiliating University	Maulana Abul Kalam Azad Universtiy of Technology (MAKAUT)	

• Name of the IQAC Coordinator	Prof. (Dr.) Sukumar Roy
• Phone No.	03324364929
Alternate phone No.	03324361285
• Mobile	9433408287
• IQAC e-mail address	coordinator.iqac@nsec.ac.in
Alternate Email address	sroybme@gmail.com
3.Website address (Web link of the AQAR (Previous Academic Year)	https://nsec.ac.in/page.php?id=5 12
4.Whether Academic Calendar prepared during the year?	Yes
<ul> <li>if yes, whether it is uploaded in the Institutional website Web link:</li> </ul>	https://nsec.ac.in/circular/2022 -23 Academic Calendar.pdf
5.Accreditation Details	

Cycle	Grade	CGPA	Year of Accreditation	Validity from	Validity to
Cycle 1	B+	2.52	2019	28/03/201 9	27/03/202 4

6.Date of Establishment of IQAC

12/06/2013

# 7.Provide the list of funds by Central / State Government UGC/CSIR/DBT/ICMR/TEQIP/World Bank/CPE of UGC etc.,

Institutional/Dep artment /Faculty	Scheme	Funding Agency	Year of award with duration	Amount
Netaji Subhash Engineering College	MoE Innovation Cell	Govt. of India	2022	1.0 Lakh
Netaji Subhash Engineering College	MoE Innovation Cell	Govt. of India	2021	1.0 Lakh
Netaji Subhash Engineering College	UBA Grant	MHRD	2020	0.5 Lakh

Electrical Engineering Dept., NSEC	MODROBS	AICTE	2019	14.75 Lakh
Dr. Swapna Roy, EE, NSEC	Seminar Grant	AICTE	2017	1 Lakh
Biomedical Engineering Dept., NSEC	MODROBS	AICTE	2017	3.6 Lakh
Electronics & Communica tion Engineering Dept., NSEC	MODROBS	AICTE	2017	9.6 Lakh
Dr. Sukumar Roy, BME, NSEC	Research Promotion Scheme	DST, WB	2012	5.33 Lakh
Dr. Sudipta Nath, EE, NSEC	Career Award	AICTE	2009	10.5 Lakh
Dr. Sudipta Nath, EE, NSEC	Young Scientist	DST	2008	3.0 Lakh
Dr. Partha Pratim Bhat tacharya, ECE, NSEC	Fast Track Career Young Scientist Scheme	SERC, DST	2008	5.82 Lakh
Dr. Partha Pratim Bhat tacharya, ECE, NSEC	Research Promotion Scheme	AICTE	2006	2.0 Lakh
Netaji Subhash Engineering College	TEQIP-I	World Bank	2005	747.8 Lakh

• Upload latest notification of formation of IQAC	<u>View File</u>		
9.No. of IQAC meetings held during the year	03		
• Were the minutes of IQAC meeting(s) and compliance to the decisions have been uploaded on the institutional website?	Yes		
<ul> <li>If No, please upload the minutes of the meeting(s) and Action Taken Report</li> </ul>	No File Uploaded		
<b>10.Whether IQAC received funding from</b> <b>any of the funding agency to support its</b> <b>activities during the year?</b>	No		
• If yes, mention the amount			
11.Significant contributions made by IQAC du	uring the current year (1	maximum five bullets)	
IEEE MTT Student Branch Chapter (SBC) received a grant of USD 1500 from the MTT Society. Additionally, student members have received travel grants, registration fees, accommodation, and awards with cash. The IEEE Kolkata Section and IEEE AP-MTT Kolkata Chapter financially sponsored all IEEE events.			
Received Best Paper Award on all Gandhinagar, Gujarat by PhD stude supervisor Dr. Koushik Dutta. The Chatterjee has received a cash pr travel grants and free accommodat	ent Anirban Chatte e first author Mr. rize of Rs 15,000	erjee and his Anirban	
Through MoU with NIELIT Kolkata - an autonomous scientific society under MeitY GOI, eleven faculty members were trained in Training of Trainers (ToT) programs for Introduction to Blockchain Technology and mentored 187 students enrolled in a blockchain technology certification course.			
Under the students' innovative project competition, Team Buzz and Team Powercon Technology won the IITF best start-up award in the "Future Entrepreneur" and "Innovation of the Year" categories organized by BNCCI. Team PowerCon with their product Energy Saver			

bagged the title of WINNERS at Shark Pool Season 2 at Amiphoria 2k23 organized by Amity University Kolkata.

The institute secured 4th position in the prestigious General Championship (GC) challenge in Cognizance 2023 organized by IIT Roorkee. Abhijit Ray, 1st year student of Electrical Engineering bagged the bronze medal at the 39th National Kyorugi and 12th POOMSE National Taekwondo championship at Vishakhapatnam.

**12.Plan of action chalked out by the IQAC in 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
Strengthening facilities for digital teaching learning and surveillance.	A total of fifty five classrooms and laboratories are equipped with ICT facilities for digital teaching learning. Online learning facilities (on- campus & off-campus) including NPTEL course materials, e- journals, e-books and library book renewal has been implemented. Additionally, two hundred twelve number of close circuit cameras including CCTV and display have been installed in the classrooms, laboratory and important areas in the campus for a safe, secure and conducive learning environment for all.
Promoting interdisciplinary research and to seek sponsored projects.	Faculty members assigned problem-centric projects to the students in healthcare, renewable energy, AI, ML, cyber security field and guided students to participate in innovation completion, Hackathon, prototype competition. Institute provided financial support to the students for the innovative competitions. Several faculty members registered as Ph.D. guide and involved in

	collaborative research with other university. Three proposals have been submitted for funding: SERB-Core Research Grant, SERB-SUPRA & CSIR- ASPIRE.
Emphasis on more research paper publications and patent.	Faculty members published thirty six research papers in UGC notified journals, eleven in other national and international journal. Twelve papers have been published with students. Thirty book chapters and thirty three papers published in national and international conference. One research paper awarded as best paper award on all tracks in IEEE WAMS 2023, Gandhinagar, Gujarat. One patent has been published and two under process.
Achieve NBA accreditation of few B.Tech programs	NBA accreditation for four undergraduate programs viz. Biomedical Engineering, Computer Science & Engineering, Electronics & Communication Engineering, and Electrical Engineering were initiated. The pre-qualifiers were submitted on 31/01/2023 and self- assessment reports were uploaded in NBA portal on 31/03/2023.
Synergize the activities of IIC as mentor institute under mentor-mentee programme by MoE's Innovation Cell.	Faculty members and students of IIC-NSEC have attended the Regional Meet of Institution's Innovation Council, organized by Ministry of Education's Innovation Cell and AICTE at GNIT. Innovation Day 2022 was celebrated with an invited talk on INNOVATION AND ENGINEERING by Mr Sanjay Kumar Das, State

	<pre>Information Security Officer and Joint Secretary, Dept of IT &amp; Electronics, Government of West Bengal. Organize a Workshop on "Learning Agility in the Digital Age" - An Industry Academia Interface with HR Learning Network.</pre>
Arrange awareness programs, workshops, e-summit, Hult Prize competition, etc. under IIC & EDC.	The Entrepreneurship and Development Cell in association with the IIC organized "Cine-B- Plan" a unique business plan competition where participants pitched their unique business ideas inspired from movies. Arranged workshop on "Innovation and Entrepreneurship as a Career Opportunity" keynote speaker Mr. Subhabrata Banerjee, Senior Program Manager, National Entrepreneurship Network. Organized "INFERNO" On-Campus Business Fest & Panel Discussion on
Stress to be imparted for innovative projects by students mentored by faculty members and in turn NSEC will become Innovation Hub.	Faculty members mentored thirty students' innovative projects and participated in Hackathons and innovative competitions. One team was selected in SIH for grand finale, team "Buzz" & Team "Powercon Technology" winning the IITF best startup award in the
Increase activities of IEEE students' chapters and CSR programs through Rotaract-NSEC.	The institute opened fourteen IEEE student branches and branch chapters under different societies and organized twenty- four events in collaboration with industries and academic institutions. A USD 1500 grant was received by MTT SBC from the MTT society. Additionally, students received awards,

	<pre>travel grants, registration fees for conferences, free accommodation and travel for workshops, and best paper awards with cash. Students have published research papers in peer-reviewed journals and conferences with the help of the student branch. NSEC- Rotaract Club arranged fourteen outreach community programs.</pre>
Introduce skill-based competitive coding by external experts in regular time table.	Coding classes were adhered in the regular time table for the entire 2nd year students with the aim to develop the problem- solving skills through coding, and the usage of shortcut techniques and libraries to perform better in timed competitive situations. The course was catered through external agency Academy of Skill Development and internal faculty members. The skill- based competitive coding on C++, Python and Java was implemented in different batches based on learners with basic knowledge of programming with low confidence, intermediate knowledge of programming with average confidence and good knowledge of programming with high confidence. The GNX society in association with the Department of CSE hosted a two day long IOT Workshop integrated with competitive coding contest.
Collaboration with TCS for the comprehensive academia interface programmes and NASSCOM for implementation of technological and soft skill	TCS Academic Interface Program (TCS-AIP) is a comprehensive high-quality academic program between TCS and NSEC, two interactive sessions have been

development programmes under future prime skill.	arranged and 230 students participated in the programs. An MoU has been signed with NIELIT Kolkata-an autonomous scientific society under MeitY GOI and a Lead Resource Centre of Future Skill Prime project on Blockchain Technology for conducting a Bridge course training program on Blockchain Technology under NASSCOM. Eleven faculty members were trained in Training of Trainers (ToT) programs for Introduction to Blockchain Technology and mentored 187 students enrolled in a blockchain technology certification course. The college has come into collaboration with Accenture for imparting training on Japanese language to our students. A total of around 150 students have been shortlisted.
Arrange FDP, seminar, conference, workshops, invited talk and webinars.	Nine professional development programs and five seminars were organized by IEEE branch chapters. The CSE department organized a seminar on "Quantum Intelligence" and five workshops by ME and CE departments on "Exploring opportunities in higher studies". GNX society arranged one webinar on "XAI and its significance in today's world" by a senior scientist of TCS. An awareness program was organized jointly with NIELIT Kolkata on "Blockchain Technology". Google developer students chapter organized online and offline workshops on Android development. Internal hackathons, start-ups, and

	innovation competitions were organized by IIC.	
Initiative for MOUs with academic institute and industry to offer certificate courses, internship, collaborative projects, papers, faculty / students exchange, etc.	Four MoUs have been signed during the year: 1. National Institute of Electronics & Information Technology (NIELIT) Kolkata, an Autonomous Scientific Society under the administrative control of Ministry of Electronics & Information Technology (MeitY), Government of India, for mentoring certificate course on Blockchain Technology, 2. Sun Eco Tech Ventures Pvt. Ltd., a	
13.Whether the AQAR was placed before statutory body?	Yes	
• Name of the statutory body		
Name	Date of meeting(s)	
BOG	06/02/2024	
14.Whether institutional data submitted to AI	SHE	
V		

Year	Date of Submission	
2022-2023	25/01/2024	

## 15.Multidisciplinary / interdisciplinary

The institute promotes innovative thinking. The institute has kept pace with the developments that has taken place in the field of engineering/ technological education in the country and also across the globe and students are encouraged to seek out-of-thebox solutions for difficult engineering problems. Apart from regular curriculum, the official Tech club of the institute brings together students from different departments together to organize various learning activities. Thus, in writing computer programming code, a student of Civil Engineering or Electrical Engineering join hands with students from Electronics and Communication Engineering. In this manner, seeds of multidisciplinary education are sown. Emerging multidisciplinary courses viz. Biomedical Engineering, Computer Science & Business Systems Engineering and Artificial Intelligence & Machine Learning have been introduced in accordance with the technological developments and changing global market scenario. In language laboratories, assignments are primarily in diverse fields. Students are free to choose or assigned project work in interdisciplinary domain. Institute innovation cell organized technical competition in multidisciplinary area and on cutting edge technologies.

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

The institute is affiliated to the MAKAUT and is bound by the rules of the University. The institute has been waiting for the university's implementation of ABC. The institute agrees in principle with the ABC. However, MAKAUT introduced an online repository of credits for B.Tech Honours Degree. The additional 20 credits that is required to attain from Massive Open Online Courses (MOOCs) platform for hounours degree. The distributed credits earned over four years are accumulated and stored digitally. Faculty members authenticate certificates and upload credits against students' enrolment number through university portal.

#### **17.Skill development:**

The institute takes special care in developing technical skills and soft skills among the students so that they can make a niche for themselves in this competitive world. Various training programs such as need based Value Added Training (VAT), Industry Readiness Programs, hands-on training, seminars, and webinars are planned according to the needs of the students on a regular basis in each and every semester. The competitive coding, aptitude and soft skill classes are incorporated in class routine. As a part of experiential and skill-based learning, college has several collaboration for industry academia programmes. One of the engaging collaboration is with NASSCOM Future Skill Prime platform.

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

The college is named after the iconic patriot Netaji Subhas Chandra Bose, whose relentless determination and dedication is the source of our vision in the pursuit of academic excellence. The institute regularly organizes workshops and interactive sessions on Art of Living, Yoga, and Meditation for lifestyle management of the students. The institute takes special initiative in observing important datesof Indian history and culture- Independence Day, Republic Day, Gandhi Jayanti, Youth Day, World Yoga Day, Teacher's day, Indian Constitution Day, etc. to make the students aware and be a part of the Indian culture and tradition.

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

The institute extensively practiced Outcome Based Education (OBE), a student centric learning methodology. All programs and courses designed and affiliated by MAKAUT which is in accordance with the latest guidelines of AICTE. The internal quality assurance cell

(IQAC) always focussed on quality initiatives, quality sustenance and quality enhancement in teaching-learning processes. All programs set target outcomes of all courses and measure attainments through assessment processes and tools. The course outcomes are mapped following Bloom's Taxonomy and sets of rubrics are used for evaluation. The attainment of program outcomes are compared with targets. The appropriate action plans are in place for attainments as per the benchmark set for course outcomes and program outcomes.

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

All the approved programmes conducted in traditional classroom based teaching-learning procedure. However, technology enabled online platform and e-resources are integrated to support learning at the best path and pace. Google classrooms are used to provide lecture materials, videos, and recording in well advance before each class. Some laboratory experiments conducted using virtual lab facilities, simulation software and life demonstration. Several

## **Extended Profile**

quizzes, assignments and MCQ tests are conducted online.

#### **1.Programme**

1.1

15

Number of courses offered by the institution across all programs during the year

File Description	Documents
Data Template	<u>View File</u>

#### 2.Student

#### 2.1

2772

652

189

# Number of students during the year

File Description	Documents
Institutional Data in Prescribed Format	<u>View File</u>
2.2	1

Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year

File Description	Documents
Data Template	<u>View File</u>

2.3

Number of outgoing/ final year students during the year

File Description	Documents
Data Template	<u>View File</u>

#### **3.Academic**

3.1

Number of full time teachers during the year

File Description	Documents
Data Template	<u>View File</u>
3.2	200

3.2

Number of sanctioned posts during the year

Extended Profile		
1.Programme		
1.1		15
Number of courses offered by the institution across all programs during the year		
File Description	Documents	
Data Template		<u>View File</u>
2.Student		
2.1		2772
Number of students during the year		
File Description	Documents	
Institutional Data in Prescribed Format		<u>View File</u>
2.2		1
Number of seats earmarked for reserved category as per GOI/ State Govt. rule during the year		
File Description	Documents	
Data Template		<u>View File</u>
2.3		652
Number of outgoing/ final year students during	the year	
File Description	Documents	
Data Template		<u>View File</u>
3.Academic		
3.1 189		189
Number of full time teachers during the year		
File Description	Documents	
Data Template		<u>View File</u>

3.2	200
Number of sanctioned posts during the year	
File Description	Documents
Data Template	<u>View File</u>
4.Institution	
4.1	68
Total number of Classrooms and Seminar halls	
4.2	1592.74
Total expenditure excluding salary during the yellow lakhs)	ear (INR in
4.3	1191
Total number of computers on campus for acade	emic purposes

# Part B

## **CURRICULAR ASPECTS**

## **1.1 - Curricular Planning and Implementation**

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

The curriculum delivery is one of the institutional strategic goals to create and maintain an environment for imparting knowledge, skills, concepts, processes, values and attitudes necessary for learners. Conscious and consistent efforts are put to bring about desirable changes in students' learning, abilities and behaviour. Institute prepare academic calendar in line with affiliated university. The course teacher prepare course file, familiarize the students with lesson plan, course objectives and outcomes at the onset of each semester. Lessons are delivered as per the routine followed by presentation with visual aid and teaching through smart techniques. Tutorial classes, laboratory experiments are conducted as per the routine and provide design based assignments and project works. Internal test, quizzes and group discussion are held at regular interval. Remedial classes for weaker students and special classes for brighter students are arranged. Soft skill, aptitude classes are accommodated in the time table. Value added training, industry

visit and internship are provided to the students.

Institute formulate "Ready Reckoner" comprises of description of academic activities, target date, performers and reviewing / supervising / monitoring authority. Students' performances are documented, results are analysed, and attainments are calculated. Teachers modify the lesson plan based on the students' feedback.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://www.nsec.ac.in/images/Academic- Activities-A-Ready-Reckoner.pdf

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The institute prepares the academic calendar to ensure academic discipline and smooth conduction of the continuous internal evaluation process. For the preparation of the detailed academic schedule, the institute depends on the affiliated University calendar. The institute has also developed a structured format "Academic Activities: A Ready Reckoner" to all, which lists component-wise academic activities to be performed during the odd and even semester program including the time limit for each work, name of the person responsible and the supervising authority.

Four continuous assessments (CAs) for theory courses and two continuous assessments (PCAs) for laboratory courses are accommodated in the academic calendar for each semester. Normally, two unit tests are considered for any two continuous assessments and the other two from the assignments, quizzes, etc.

The Internal Quality Assurance Cell (IQAC) continuously monitors and evaluates the internal evaluation mechanism and plays a pivotal role in enhancing the teaching-learning process by ensuring quality in all operations. The recommendations from various committees and the management are accounted and subsequently, corrective actions are undertaken. Based on the requirement, IQAC cell also formulates quality benchmark policies for improving quality in continuous internal evaluation

#### and for proper implementation of outcome-based education.

File Description	Documents
Upload relevant supporting document	<u>View File</u>
Link for Additional information	https://www.nsec.ac.in/page.php?id=557

#### **1.1.3 - Teachers of the Institution**

A. All of the above

participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/ certificate/ Diploma Courses Assessment /evaluation process of the affiliating University

File Description	Documents
Details of participation of teachers in various bodies/activities provided as a response to the metric	<u>View File</u>
Any additional information	<u>View File</u>

#### **1.2 - Academic Flexibility**

# **1.2.1** - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

#### 1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

#### 15

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

#### 1.2.2 - Number of Add on /Certificate programs offered during the year

# **1.2.2.1 -** How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

#### 40

File Description	Documents
Any additional information	<u>View File</u>
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template )	<u>View File</u>

# **1.2.3** - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

#### 919

File Description	Documents
Any additional information	<u>View File</u>
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View File</u>

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

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

Different cross-cutting societal issues are addressed by the institution through courses in the curriculum, various bodies, programs and policies. The institution has taken much care to introduce a culture of expressing controlled behaviour, discipline, gender sensitization, environmental awareness, moral values, healthy relationship, empathy and sympathy.

The institution caters to all the students from a heterogeneous socio-cultural background; introducing the idea of gender sensitization from the very early days through the Orientation and Induction Program. The social issues about relationships, caste, declining sex ratio, eve-teasing, racism, sexism, etc. are delicately discoursed through English, Language Laboratory and Universal Human Values courses in the curriculum. Awareness programs on gender equality and women's empowerment are undertaken through guest lectures by eminent social workers and psychometric counseling.

The course curriculum is also integrated with Environmental Sciences and Biology for Engineers. Students are well exposed to ecosystems, biodiversity and its conservation, renewable and nonrenewable resources, environmental pollution and management, and pollution control acts. Assignments on home energy saving, green home project, home water saving, rainwater harvesting, best use of recycling services, organic waste, composting, toxins/pollution prevention, waste and consumption, and sustainable living. Campus clean, eco-rallies and green abhiyyan programs are conducted under Swachh Bharat.

File Description	Documents
Any additional information	<u>View File</u>
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View File</u>

# **1.3.2** - Number of courses that include experiential learning through project work/field work/internship during the year

#### 121

File Description	Documents
Any additional information	<u>View File</u>
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	No File Uploaded
MoU's with relevant organizations for these courses, if any	<u>View File</u>
Institutional Data in Prescribed Format	<u>View File</u>

#### 1.3.3 - Number of students undertaking project work/field work/ internships

84

File Description	Documents
Any additional information	<u>View File</u>
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<u>View File</u>

#### 1.4 - Feedback System

# 1.4.1 - Institution obtains feedback on the A. All of the above syllabus and its transaction at the institution from the following stakeholders Students Teachers Employers Alumni

File Description	Documents
URL for stakeholder feedback report	https://nsec.ac.in/impdoc/agar2022-23/141 FeedBackDatabase2022-23.pdf
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>
Any additional information	<u>View File</u>

## **1.4.2 - Feedback process of the Institution** may be classified as follows

A. Feedback collected, analyzed and action taken and feedback available on website

File Description	Documents
Upload any additional information	<u>View File</u>
URL for feedback report	https://nsec.ac.in/impdoc/agar2022-23/142 StudentsFeedbackEvenSemester2022-2023.pdf

# TEACHING-LEARNING AND EVALUATION

## 2.1 - Student Enrollment and Profile

## 2.1.1 - Enrolment Number Number of students admitted during the year

#### 2.1.1.1 - Number of students admitted during the year

#### 693

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

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

#### 2.1.2.1 - Number of actual students admitted from the reserved categories during the year

#### 127

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

#### 2.2 - Catering to Student Diversity

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

Assessment of the learning level of the students is a continuous process which is pursued throughout the program. The students admitted to programs are from diverse backgrounds with different mindsets. In the very first day of orientation cum induction program, students are encouraged to express their problems and elicit other information for the engineering program. The teachers analyze the problems of students especially those who come from non-English medium. An assessment test is carried out to determine the student's potential to achieve their goal. A structured multiple-choice question format based on Mathematics, Physics & Chemistry in three grades (easy, moderate and tough) with negative marking and an English questionnaire to evaluate the student's ability to communicate clearly and accurately in ascientific fashion with fluid and cohesive arguments.

The progress of the students is continuously monitored and evaluated through interactive classroom teaching, daily activities, feedback from the subject teachers and performance in internal tests, assignments, quizzes and end-semester examinations. From the above assessment, the slow and advanced learners are identified. Subsequently, both categories of students are channelized through separate special programs viz. mentoring system, special coaching, remedial classes, soft skill and aptitude classes, MOOCs courses, Gate tutor, etc.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/impdoc/agar2022-23/221 Policy SlowLearnerandAdvancedLearners.pdf
Upload any additional information	<u>View File</u>

#### 2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students	Number of Teachers
2772	189

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

#### 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

The institute focuses on student-centric learning and provides a creative learning environment so that students can think independently and interact with teachers and peers. The university curriculum provides sufficient scope for experimental learning which the institute has fully exploited. The institute has also evolved several innovative techniques to enhance the experimental learning of the students such as learning through observation, value-added training programs, extramural laboratory practices, simulation-based laboratories, team-based project work, programming proficiency development programs, tech-oriented courses in collaboration with professional bodies, industry visit and internship.

Participative learning develops an aptitude for self-learning and enhances the creativity of the students. The methods and policies adopted are: teaching through smart techniques, teaching while you learn, seminar and PPT presentations, and technical events. Active participation in organizing Technical seminars, Tech Fest, Cultural Programs aids in the development of their managerial, leadership and teamwork capabilities. IIC and EDC cells inculcate the spirit of innovation and entrepreneurship, support start-up creation through guidance and mentorship, and arrange idea-to-prototype competitions, prototype realization competitions and Hackathons. The analytical and problem-solving abilities of the students are enhanced through design-based assignments and industry-related issues, extensive tutorial work, social services in groups and collaboration.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	https://nsec.ac.in/impdoc/aqar2022-23/262 _Attainment impdoc 262 Attainment.pdf

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The college has adopted ICT in its teaching-learning process two decades back. The use of computers, laptops and the Internet has become a common practice for teachers and students. The college has ICT-enabled classrooms which helps the e-learning process. The library is automated and accessible to e-resources vide LIBSYS with unlimited user login. The digital library is a rich collection of NPTEL video lectures and a subscription of several e-books, and e-journals. The entire campus is Wi-Fi enabled which helps students stay connected to the internet for updated information and tech-oriented learning. Teachers try to make the possible use of technology to improve the teaching-learning process.

Once the COVID-19 pandemic affected traditional teachinglearning, the IQAC immediately felt the need for digital teaching-learning and initiated the process of implementation. The entire faculty fraternity efficiently adopted online platforms and created digital classrooms using G-Meet and Zoom. They have developed e-content and used e-resources. Laboratory experiments were conducted using virtual Lab facilities, simulation software and life demonstration. Concerned faculty members provided study materials and assignments in Google Classroom and took quizzes at regular intervals. Teachers effectively used ICT-enabled tools and resources viz. laptops,

## smartphones, headphones, virtual boards, internet, videolectures, audio-lectures, PPT, YouTube links, e-contents, etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching- learning process	<u>View File</u>

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

#### 2.3.3.1 - Number of mentors

#### 94

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	<u>View File</u>
Mentor/mentee ratio	<u>View File</u>

## 2.4 - Teacher Profile and Quality

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

#### 189

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

#### 2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality /

#### D.Sc. / D.Litt. during the year

#### 61

File Description	Documents
Any additional information	<u>View File</u>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<u>View File</u>

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

#### 2.4.3.1 - Total experience of full-time teachers

#### 1977

File Description	Documents
Any additional information	No File Uploaded
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

#### 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Internal assessments are carried out as per the schedule in the academic calendar. The institute conducts four continuous assessments (CAs) of 25 marks for theory courses and two continuous assessments (PCAs) of 40 marks for laboratory courses each semester. Normally, two unit tests are considered for any two CAs and the rest two from the assignments, quizzes, etc.

Theory courses:

- Course Outcomes (COs) based question paper for unit tests.
- Answer scripts are evaluated and shown to the students within 7 days.
- Answers are discussed in detail.
- Tabulated marks are displayed within the next 2 days.

Laboratory practices:

- Laboratory reports are evaluated and shown by the next lab day.
- Marks were awarded for each experiment and handed over to the students along with the corrected laboratory reports.

Sessionals:

- Rubrics-based assessment for all assignments.
- Weightages are given on attendance, a notebook showing the progress of sessional work, final report and viva voce.

Projects/Seminar:

- The assessment is based on rubrics that clearly outline the different evaluation criteria and the quality/score
- Weightages are given to creativity, originality, uniqueness and practical benefit aspects of the project, if any.
- Mid-term progress evaluation carried out through PowerPoint presentation and report submission.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	https://makautwb.ac.in/rti/First%20Rules% 20and%20Regulations%20of%20WBUT.pdf

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, timebound and efficient

The examination-related grievances are handled by the institute to the extent that is possible under its jurisdiction. As the institute is responsible only for the internal assessment part, any grievances are dealt with internally. If there is any dispute related to the mechanism of the internal evaluation system then that is referred to the head of the departments (HODs) as well as the mentor for an amicable solution.

Since internal assessment is very transparent, the grievances are few and their occurrence probability is also low. However, if any such grievance arises related to sessional, practical or unit tests, all are dealt with by the faculty concerned almost immediately. In general checking of the unit test answer scripts is completed within 7 days and the corrected scripts are shown to the students for clarification of doubts, if any. Finally, the unit test marks are published and displayed within the next 2 days. If any student is not satisfied with the marks awarded even after clarification by the teacher concerned, the student may appeal to the concerned HOD through the mentor. The HOD takes necessary measures for reassessment of the answer scripts within a week. Assignments and practical reports are checked and marks are awarded within one week.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	
	<u>http://nsec.edugrievance.com/</u>

### 2.6 - Student Performance and Learning Outcomes

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

The primary and fundamental component of outcome-based education is the attainment of course outcomes (COs) and is calculated from students' performance in internal continuous assessments and end-semester university examinations. The course outcomes represent the resultant knowledge, skills and attitudes the student acquires from the course. The course coordinator has defined the course outcomes in consultation with stakeholders if not mentioned in the university syllabus and the number of course outcomes is around six for each course. While writing course outcomes, Bloom's Taxonomyof Cognitive Skill is considered. These learning outcomesclearly describe the meaningful, observable and measurable knowledge, skills and/or dispositions students should able to do at the end of the course.

Program Outcomes (POs) represent the knowledge, skills and attitudes the students should possess at the end of graduation. There are twelve such graduate attributes irrespective of the programs defined by the National Board of Accreditation (NBA), India. The program-specific outcomes (PSOs) are explicit graduate attributes for a particular program and are around three for each program defined by the department. The course teacher prepares course files and familiarizes the students with lesson plans, course objectives and outcomes at the onset of each semester.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://nsec.ac.in/page.php?id=142
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

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

One of the important aspects of Outcome-Based Education (OBE) is the assessment of students' performance and achieving the set attainment for course outcomes (COs) and Program Outcomes (POs). COs define the qualities attained by the students on completion of a particular course in each semester. POs are the twelve graduate attributes defined by the NBA. The level of CO attainment is measured by the marks scored in internal continuous assessment (X) and University examination (Y). The institute sets the attainment levels based on the actual percentage of students getting a set percentage of marks. Each question is mapped with COs which effectively helps to determine the achievement of each student. The final course attainment as per the set percentage of marks for the theory and laboratory courses is as: Theory courses = 0.7\*X + 0.3\*Y and Laboratory courses = 0.6\*X + 0.4\*Y.

All COs are mapped with POs and attainment of POs is calculated from direct assessment (DA) and indirect assessment (IA). The total attainment of each PO is calculated as: Total Attainment (TA) = 0.8\*DA + 0.2\*IA. The results are analyzed and the institution adopts methodology to improve upon any PO, if needed, through revision of the program, review of pedagogic method, extramural training and feedback.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://nsec.ac.in/impdoc/agar2022-23/262 _Attainment_impdoc_262_Attainment.pdf

### 2.6.3 - Pass percentage of Students during the year

# **2.6.3.1** - Total number of final year students who passed the university examination during the year

### 610

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
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://nsec.ac.in/impdoc/aqar2022-23/SSS 2024.pdf

### **RESEARCH, INNOVATIONS AND EXTENSION**

### **3.1 - Resource Mobilization for Research**

**3.1.1** - Grants received from Government and non-governmental agencies for research projects / endowments in the institution during the year (INR in Lakhs)

**3.1.1.1 - Total Grants from Government and non-governmental agencies for research** projects / endowments in the institution during the year (INR in Lakhs)

### 2.32

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

3.1.2 - Number of teachers recognized as research guides (latest completed academic year)

### 3.1.2.1 - Number of teachers recognized as research guides

### 28

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

**3.1.3** - Number of departments having Research projects funded by government and non government agencies during the year

**3.1.3.1** - Number of departments having Research projects funded by government and nongovernment agencies during the year

-	
_	
_	L

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://main.icmr.nic.in/

### **3.2 - Innovation Ecosystem**

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institute encourages the creative energy of the students to work on new ideas and innovation. The major focuses are to create a vibrant local innovation ecosystem and to develop better cognitive ability for technology students. The NSEC Entrepreneurship Development Cell (EDC-NSEC) started its journey to inculcate the spirit of innovation and entrepreneurship amongst young students and encourage and support start-up creation through guidance, mentorship and support. The cell would also spread the message of entrepreneurship and create a culture of entrepreneurship at the NSEC campus and beyond.

The Institute Innovation Council (IIC) has been constituted as prescribed by MHRD-IIC to methodically foster the culture of

innovation as a part of the curriculum. The council encourages, inspires and nurtures the talent of young and creative students to work on new ideas leading to establishing an innovative ecosystem in the campus. The young and innovative minds are attracted through expert talk sessions, periodic workshops/ seminars/ interactions with entrepreneurs, investors, and professionals. Several Hackathons, idea competitions, and minichallenges with the involvement of industries are arranged for active involvement and even encourage the students to participate at national and state levels. Few amongst the "Job-Seekers" would be converted to "Job- Generators" through the entrepreneurial route.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nsec.ac.in/page.php?id=601

**3.2.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

**3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology,** Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

31

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

### 3.3 - Research Publications and Awards

3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

3.3.1.1 - How many Ph.Ds registered per eligible teacher within the year

1

File Description	Documents
URL to the research page on HEI website	https://www.nsec.ac.in/page.php?id=556
List of PhD scholars and their details like name of the guide, title of thesis, year of award etc (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>

**3.3.2** - Number of research papers per teachers in the Journals notified on UGC website during the year

# **3.3.2.1** - Number of research papers in the Journals notified on UGC website during the year

### 37

File Description	Documents
Any additional information	<u>View File</u>
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

**3.3.3** - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

**3.3.3.1** - Total number of books and chapters in edited volumes/books published and papers in national/ international conference proceedings year wise during year

### 55

File Description	Documents
Any additional information	<u>View File</u>
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

### **3.4 - Extension Activities**

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The institute firmly believes that education is not only confining to classroom activities of students but also

sensitizing them to understand the people's life in the society and improve the living of the underprivileged. The objective lies in taking action through community and services in creating head-on sustainable solutions to local and world challenges. The students and faculty members regularly conduct various extension activities in the neighboring community mainly through NSS Unit and NSEC-Rotaract Club. The institute has also adopted five villages under Unnat Bharat Abhiyan along with the existing social activities.

Participation in extension activities transforms the outlook of students and enlightens the spirit of social responsibility to create a peaceful society. The Rotaract community looks forward to expanding their professional network and exchanging ideas to cultivate life-long global friendships and highlighting the importance of community service as well as self-service. Several initiatives were taken by the club to provide essentials such as Cloth Donation and drawing competitions to underprivileged children, distributing food packages, drawing accessories and stationaries to orphans, tree plantation and blood donation camp.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=585
Upload any additional information	<u>View File</u>

**3.4.2** - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

**3.4.2.1** - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

21

File Description	Documents
Any additional information	<u>View File</u>
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

# 3.4.3 - Number of extension and outreach programs conducted by the institution through

NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

### 25

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

3.4.4 - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

### 2077

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

### 3.5 - Collaboration

**3.5.1** - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

**3.5.1.1** - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

42

File Description	Documents
e-copies of related Document	<u>View File</u>
Any additional information	<u>View File</u>
Details of Collaborative activities with institutions/industries for research, Faculty	<u>View File</u>

**3.5.2** - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

**3.5.2.1** - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

3

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

# INFRASTRUCTURE AND LEARNING RESOURCES

### 4.1 - Physical Facilities

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

According to AICTE and affiliated University norms, the physical facilities and infrastructures have been established to support and boost teaching-learning in conformity with best academic practices. The campus is spread over 20.29 acres of land with 6,575 square meters of free/air space, facilitating teaching-learning, career progression, and research. Each department has adequate physical space and academic infrastructure, offering an attractive environment for imparting quality education.

The classrooms are well-furnished, ventilated and spacious, the majority of the classrooms are equipped with computers, LCD, webcam, headphones, LAN, and Wi-Fi connectivity. All

laboratories are well-equipped and well-maintained with added facilities for conducting extramural experiments. All departments have an adequate number of computer laboratories along with one central computer laboratory. Some laboratories are equipped with virtual facilities and simulation software for live demonstration of experiments. The college has two state-ofthe-art English communication labs, graphics halls, an AutoCAD lab and workshops. The institution has a multimedia centre equipped with audio-visual equipment and a Webinar centre for video conferencing. Central and departmental laboratories are equipped with adequate numbers of instructional resources. Seminar halls and auditoriums have LCD facilities and adequate seating capacity. The campus is LAN and Wi-Fi enabled, and students can access the internet at any point.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nsec.ac.in/page.php?id=517

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

Sports are an integral part of education with simultaneous and holistic development of the mental and physical health of the students. The huge green-field college playground is the place for outdoor sports facilities including a football court, volleyball court, tennis court, cricket pitch and open space for yoga, etc. A small construction in the same area accommodates a gymnasium and drinking water plant for supplying neighbouring locality at a very nominal cost. The indoor arrangement within the campus comprises of a badminton court, table tennis, carom, chess, etc. Sports club organizes different sports tournaments and conducts annual sports where a large number of students and faculties participate in the same. The winners are provided with honours like medals, certificates and trophies. Students are provided with the necessary support to participate in intercollege tournaments and university sports programs.

The institution is committed to creating a balanced atmosphere between cultural and sports activities. The cultural club conducts various cultural events, literary activities and competitions around the year for students. The college encourages the students to participate in various cultural activities and motivates them to excel in their fields of interest like singing, recitation, sketching, dancing, theatres, short films, photography, etc. The indoor area accommodates various exhibitions and festivals.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nsec.ac.in/page.php?id=519

# 4.1.3 - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

50

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	www.nsec.ac.in/page.php?id=517
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

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

### 349.28

File Description	Documents
Upload any additional information	No File Uploaded
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

### 4.2 - Library as a Learning Resource

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

The college Central Library is well-ventilated and has open access to Books, Periodicals, Journals, Special Reports, Theses, Indian Standards, Magazines, Newspapers, Question papers of the affiliating university, etc. The area is Wi-Fi enabled having a large air-conditioned Reading room with a seating capacity of 100 users. The Central Library has a rich collection of books, print journals, IEEE, CD / DVDs, lecture videos from NPTEL and ebooks, and e-journals which are accessible from anywhere on the campus. Every semester, new titles and new volumes are being added, new editions of the old books are being procured, and additional e-books, and e-journals are being purchased as a part of continuous enrichment.

Name of ILMS software: LSEase (rel.5.0)

Nature of automation: Fully automated

Version: College version (Cloud version 2023)

Year of automation: 2006

TCS iON Library Software

DDF Version: 14.04.00.02

Year of Automation: Sep., 2022

An e-resources centre has been set up in the library using LIBSYS with unlimited user login. The circulation module covers all operations of circulation, member records with an option for printing. The main features of the module are single-screen issues, return and renewal along with total details of members with photos and statistical reports. The database module helps in database creation and maintenance. A box is kept in the library for suggestions and overall improvement.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional Information	https://www.nsec.ac.in/page.php?id=328

# 4.2.2 - The institution has subscription for A. Any 4 or more of the above the following e-resources e-journals e-ShodhSindhu Shodhganga Membership ebooks Databases Remote access toeresources

File Description	Documents
Upload any additional information	<u>View File</u>
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

**4.2.3** - Expenditure for purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

**4.2.3.1** - Annual expenditure of purchase of books/e-books and subscription to journals/ejournals during the year (INR in Lakhs)

### 4.67

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

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

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

320

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

# 4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The institute continuously keeps upgrading the internet bandwidth as the latest teaching-learning methods demand the usage of MOOCS/SPOKEN TUTORIAL/NPTEL/Coursera/Webinars etc. A separate server with 20 TB HDD is being maintained exclusively for NPTEL video streaming within the campus. The institute keeps upgrading the software packages; new software packages presently being used in the industry, are being purchased to prepare the students industry-ready. The institution continuously upgrades multimedia facilities like audio-visual equipment and a Webinar centre which facilitates the video conference for effective teaching-learning process. The departments of the institution are equipped with the latest technology projectors so that teachers can teach through audio-visual aids and show video lectures of eminent personalities. Teachers are gradually trained to use more and more ICT facilities and students present their seminars and periodic project progress reports through ICT facilities.

There are adequate budget provisions for the purchase, upgrading and maintenance of computers, servers, and other system-related equipment/items. All the computers of the institution are connected with LAN and the entire campus is Wi-Fi connected. The library system is controlled by Libsys Software. Students and faculty members can access the online library system from their nodes. Internal backbone network connectivity had been upgraded from STP to Fibre optics.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://nptel.ac.in/localchapter/statisti cs/208

# **4.3.2 - Number of Computers**

### 1191

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>

### 4.3.3 - Bandwidth of internet connection in

### the Institution

File Description	Documents
Upload any additional Information	<u>View File</u>
Details of available bandwidth of internet connection in the Institution	<u>View File</u>

### 4.4 - Maintenance of Campus Infrastructure

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

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

#### 73.41

File Description	Documents
Upload any additional information	No File Uploaded
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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

The administrative officer supervises the regular maintenance and proper utilization of infrastructural facilities of the institute. The maintenance works are mainly carried out by trained in-house experts and some are outsourced to external agencies. Equipment and furniture are procured through the central purchase committee. Computers and software are upgraded as per the needs of the department and market relevance.

All laboratory equipment, computers, library books, and pedagogic tools like projectors, laptops, microphones, etc. located in the departments are to be taken care of by the HOD. Stock Registers are maintained as regards their procurement prices and other details like location. For expensive items, separate log books for utilization are maintained. In case of repair of these items, the HOD is empowered to contact the supplier or servicing centre and place an order after obtaining approval from the authority.

Sports items are replaced on the recommendation of the Facultyin-charge (FIC) of Sports and games. The playground is maintained under the FIC supported by the Estate Maintenance. Student common rooms, general-purpose infrastructure and support systems are maintained by the Administrator. All central facilities are under the direct control of the Principal, who is responsible for supervising their utilization and functioning with the help of relevant committees.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	<pre>www.nsec.ac.in/page.php?id=517</pre>

### STUDENT SUPPORT AND PROGRESSION

### 5.1 - Student Support

**5.1.1** - Number of students benefited by scholarships and free ships provided by the Government during the year

**5.1.1.1 -** Number of students benefited by scholarships and free ships provided by the Government during the year

### 757

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

**5.1.2** - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

# **5.1.2.1** - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

36

File Description	Documents
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>

5.1.3 - Capacity building and skills A. All of the above enhancement initiatives taken by the institution include the following: Soft skills Language and communication skills Life skills (Yoga, physical fitness, health and hygiene) ICT/computing skills

File Description	Documents
Link to Institutional website	https://www.nsec.ac.in/#
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

**5.1.4** - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

344

**5.1.4.1** - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

344

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

5.1.5 - The Institution has a transparent mechanism for timely redressal of student grievances including sexual harassment and ragging cases Implementation of guidelines of statutory/regulatory bodies Organization wide awareness and undertakings on policies with zero tolerance Mechanisms for submission of online/offline students' grievances Timely redressal of the grievances through appropriate committees

### A. All of the above

File Description	Documents
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student grievances including sexual harassment and ragging cases	<u>View File</u>

# 5.2 - Student Progression

### **5.2.1** - Number of placement of outgoing students during the year

### **5.2.1.1** - Number of outgoing students placed during the year

495

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student placement during the year (Data Template)	<u>View File</u>

# **5.2.2** - Number of students progressing to higher education during the year

# 5.2.2.1 - Number of outgoing student progression to higher education

### 25

File Description	Documents
Upload supporting data for student/alumni	<u>View File</u>
Any additional information	No File Uploaded
Details of student progression to higher education	<u>View File</u>

5.2.3 - Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

# 5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

# 12

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<u>View File</u>

# **5.3 - Student Participation and Activities**

# 5.3.1 - Number of awards/medals for outstanding performance in sports/cultural activities

at university/state/national / international level (award for a team event should be counted as one) during the year

# **5.3.1.1** - Number of awards/medals for outstanding performance in sports/cultural activities at university/state/ national / international level (award for a team event should be counted as one) during the year.

#### 5

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at univ ersity/state/national/internation al level (During the year) (Data Template)	<u>View File</u>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

The students of this college are an integral part of all college activities. Students provide the necessary input required by the management as they are directly connected and involved in various important processes. The institute extended support and was given responsibilities to organize different activities and events. To inculcate the qualities of leadership and organization, active student bodies are in place along with a strong representation of students in the academic and administrative bodies/committees.

Different student bodies are involved in organizing cocurricular and extra-curricular activities under the guidance of faculty representatives. Such a platform offers a plethora of opportunities to students to give them a voice of their own and shed their inhibitions through enriching and engaging experiences. Club activities, workshops and intra-domain competitions enhance communication, team management, time management, resource management, and leadership skills and above all build confidence in each student.

Various student councils:

- 1. Technical Club-Phoenix
- 2. Eco Cultural Club
- 3. Literacy Club
- 4. Lensified Club
- 5. Sports Club
- 6. IEE Students Chapter
- 7. Google Developers Club
- 8. GNX Society
- 9. Code Chef Campus Chapter
- 10. NSS unit
- 11. NSEC-Rotaract Club.

Students' representation in Institution bodies/committees:

- 1. Internal Quality Assurance Cell
- 2. Library Committee
- 3. Placement & Training Committee
- 4. Career Development Council
- 5. IIC & EDC
- 6. Internal Complaint Committee
- 7. Anti-Ragging Committee

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=341
Upload any additional information	<u>View File</u>

**5.3.3** - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

**5.3.3.1** - Number of sports and cultural events/competitions in which students of the Institution participated during the year

17

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

### 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Alumni are one of the prime stakeholders of the institution. The alumni association started its journey in the year 2008 with the name Netaji Subhash Engineering College Alumni Association (NSECAA). This NSECAA is exclusively for charitable, literacy and educational purposes. The institution is extremely proud of its alumni. Most of them are successful in their careers in profession, higher education and in the field of entrepreneurship. Institute successfully draws supports through Alumni meets on 23rd January each year in College Foundation Day and seeks suggestions for the development of the institution. They share their experiences and knowledge with the ace students and motivate them to achieve their goals. All departments also arrange reunion/alumni meets under the umbrella of NSECAA.

Alumni Contributions:

- 1. Sharing accomplishments and success stories to current students.
- 2. Delivering special lecture and motivating enrolled students.
- 3. Providing suggestion to modernize the existing facilities and upgrade at per industry requirements.
- 4. Facilitating the industrial training and field visit.
- 5. Advocating placement, industry visit and internship.
- 6. Assisting financial support, helping in pre-placement training and placement.
- 7. Facilitating in collaboration and MOUs with academia and industry.

- 8. Establishing and fostering community relationship amongst NSEC alumni
- 9. Providing feedback for academic reform.
- 10. Contributing professional development as members of IQAC.

File Description	Documents
Paste link for additional information	http://www.alumni.nsec.ac.in/
Upload any additional information	<u>View File</u>

# 5.4.2 - Alumni contribution during the year D. 1 Lakhs – 3Lakhs (INR in Lakhs)

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

### GOVERNANCE, LEADERSHIP AND MANAGEMENT

### 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Board of Governors (BOG) is the supreme authority in respect of all matters concerning the institution - academic, administrative or financial. BOG acknowledges the faculty as the backbone of the institute. Hence instead of a micro level control, it encourages faculty to make decisions and implement them for building a strong academic base in the institute. BOG plays the role of a leader in framing a policy, renders all necessary help to the faculty for implementation of the policy keeping its role restricted mostly to that of a facilitator.

Policy laid down by the BOG through the vision of the institute speaks of accomplishment of excellence in engineering and technological education, research and entrepreneurship to render services to the society. The perspective plans to achieve the targets i.e. vision of the institute, are elaborated through the four stages of Mission in sequential order. The plans have been so made that the target is achievable by the faculty with minimal guidance of the BOG, the Management.In the prevailing bottom-top approach of institutional governance, institute is faculty-centric and faculties are empowered to take all decisions regarding academic issues and their implementation

### within the frame work of the institute's vision and mission.

File Description	Documents
Paste link for additional information	www.nsec.ac.in/page.php?id=98
Upload any additional information	<u>View File</u>

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

The institute follows a Bottom-Top approach, pursuance of which results in a decentralized and participative management. It is believed that any problem or issue should be handled at the level of origin by those who are directly involved. Matters only brought to the notice of the hierarchy when it cannot be solved or resources are needed. Quite naturally it starts from pedagogic management of departmental programmes, and related physical and academic resources. However, the guidelines are framed by the department collectively under the guidance of HODs/Deans/Principal. Board of Governors (BOG) has empowered different committees under the guidance of Principal/Director to manage all issues related to academics, their implementation, and administrative problems involving students.

In Institute Committees, majority of the members are faculties. The committee decisions are final and in case of dispute, the BOG is the final authority. For BOG Committee, one professor and one assistant professor are nominated. BOG is the apex body to take final decisions on academic, administrative and financial issues related to the institute. As per the decentralization policy, all academic matters are considered under the purview of Academic Committee (AC) and all academic related policies and quality initiatives by Internal Quality Assurance Cell (IQAC).

File Description	Documents
Paste link for additional information	<u>https://nsec.ac.in/images/all-</u> <u>committees-2023.pdf</u>
Upload any additional information	<u>View File</u>

### 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

"Pursuit of excellence in Education" has been identified as the first and foremost distinctive feature in the vision of the institute. Several strategic plans were conceived and actualized to achieve the goal. One such operational example:

#### Industry Collaboration and MOU with Different Organizations

The institution immensely felt the need for beyond-curriculum training for industry readiness where the involvement of experts from industry/institute is indispensable. During this period, colleges signed MOUs with different top-notch organizations and some departments signed MOUs with universities for academic collaborative research.

- MOU with NASSCOM: Impart training on the latest technologies and already, a couple of workshops were organized by NASSCOM.
- 2. MOU with Great Learning: Impart training on the latest technologies and extend support for the placement process.
- 3. MOU with GTT Foundation: Impart training on GD, interview skill enhancement and Mock PI. Already Mock Interview sessions organized for the final year.
- 4. MOU with TCS: TCS induced B.Tech Programme in Computer Science & Business Systems (CSBS). TCS has designed the syllabus in alignment with to needs of the IT industry. Organize FDP to train faculty.
- 5. MOU between the Department of ECE and A. K. Choudhury School of Information Technology, University of Calcutta: Training and research activities in the domain of IoT and Cyber-Physical system.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://nsec.ac.in/page.php?id=709
Upload any additional information	<u>View File</u>

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

Board of Governors (BOG):

BOG is the highest authority with nominated representatives from

the Society. BOG is responsible for the governance of the institute, framing directive principles and policies, service rules, amending and approving policies, appointment in tiers, and approving the budget.

The Administrative Positions as set up by the BOG for administering the academic and administrative activities of the institution:

- 1. The Director is empowered by the Society to supervise the college in close coordination with the Governing Body and Head of the Institution.
- 2. The Principal being the head of the Institution is the charge of administration and all academic programmes and activities. The Dean and Heads of the Departments support the principal in the smooth functioning of academic activities.
- 3. The Dean supervises the research and development activities and is in charge of the academic affairs of the college.
- 4. The Administrative Officer looks after the administrative activities supported by the administrative officer.
- 5. Student Welfare Officer coordinates co-curricular and extra-curricular activities and is responsible for the well-being of the students.
- 6. The Chef Coordinator supervises and monitors the Entrepreneurship and Innovation activities.

Various statutory bodies where faculty representation is maximum; viz. Internal Quality Assurance Cell, Academic Committee, Finance Committee, Anti-ragging Committee, Internal Complaint Committee, Grievance and Redressal Committee for smooth conduction of academic and administrative activities.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/page.php?id=677
Link to Organogram of the institution webpage	https://nsec.ac.in/page.php?id=99
Upload any additional information	<u>View File</u>

6.2.3 - Implementation of e-governance in A. All of the above areas of operation Administration Finance

# and Accounts Student Admission and Support Examination

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	<u>View File</u>
Details of implementation of e- governance in areas of operation, Administration etc(Data Template)	<u>View File</u>

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

6.3.1 - The institution has effective welfare measures for teaching and non-teaching staff

The following welfare schemes for teaching and non-teaching staff are in vogue in the institute.

- Welfare Cooperative name Netaji Subhash Engineering College Employees Cooperative Credit Society Ltd. has been formed to create funds for lending money to its members.
- 2. Medical facilities:
- Free treatment on working days at the Medical Unit of the institute
- Free ambulance facility for employees and family from home.
- 1. Children's education:
- All employees enjoy a concession in children's education if their wards study in the TIG-managed Techno Model School.
- 1. Study leave:
- Special facility to the regular faculties "leave on without pay basis" for updating their knowledge and experience and for upgrading qualifications.
- 1. Other employee benefits:
- Provident funds to all eligible employees covered under

the EPF scheme as per applicable rules

- All eligible employees covered by ESI as per the ESI Act.
- 1. Employees' Group Insurance Scheme:
- Employees whose salary account in Axis Bank Ltd is covered under TATA AIG group medicare.
- 1. Policy for support to career development:
- Concession to teaching loads and special leaves granted as and when needed for carrying out higher studies, research, pursuing Ph.D. or professional development like training or visits to industries, etc.
- Technical staff members are encouraged to enhance of their qualifications.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/impdoc/631_%20Effe ctive%20welfare.pdf
Upload any additional information	<u>View File</u>

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

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

1

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

**6.3.3** - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

### 6.3.3.1 - Total number of professional development /administrative training Programmes

### organized by the institution for teaching and non teaching staff during the year

9

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

6.3.4 - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes, Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)

**6.3.4.1** - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

### 47

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	<u>View File</u>
Details of teachers attending professional development programmes during the year (Data Template)	<u>View File</u>

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

Performance Appraisal for all teaching and non-teaching staff is mandatory for confirmation of service and promotion. It depends on the Annual Performance Review (APR) by the Director/Principal and Head of the Departments followed by a personal appraisal held by the Appraisal Committee. A well-formulated mechanism is in place to review periodically the progress and quality of teaching and non-teaching staff.

A Self-Appraisal Form (SAF) is to be filled in by an employee desirous of being appraised for promotion. The regular employees are eligible for promotion and contractual employees are not. However, the latter categories are eligible for increments postsuccessful performance before the appraisal committee. An SAF will carry the following details to be filled in by the employees concerned. Its validity is normally for a year. The contents are:

- Employee details
- Qualifications
- Description of job carried out in detail
- Achievements
- For faculty: academic, professional membership, research and guidance, publications, technological developments and contributions.
- For non-teaching staff: job-related proficiency, commendable services rendered and contributions.

An employee awarded with a poor/unsatisfactory rating in any of the last three APRs will not be eligible for promotion unless he/she has acquired two excellent ratings, one of which has to be in the last APR.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/impdoc/635.pdf
Upload any additional information	<u>View File</u>

### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The institute has a transparent mechanism for internal and

external audits as per the government rules. The institute conducts internal and external audits annually.

1. Internal Audit:

The audit team consists of:

- Qualified auditor from Corporate (Society's) Office nominated by the BOG
- Institute Accountant
- Office Assistant attached to institute account's section

The Institute account section provides all necessary records of income-expenditure vouchers, approval documents, approved budgets, etc. to the team. This includes revenue generated from all sources for the college. The internal auditor does a thorough check and verification of supporting documents including fee receipts and payment vouchers of the transaction carried out in each financial year. The auditor also ensures that all payments are duly authorized. A statutory audit report is prepared and submitted to the college management for review.

### 1. External Audit:

External audit is carried out every year by the corporate office. On submission of the internally audited accounts to the corporate office, the accounts are arranged to be audited by a chartered accountant appointed by the board of trustees. Institute's accounts are examined as those of a group's (Society's) subsidiary. The institute accountant is also asked to be present.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/page.php?id=681
Upload any additional information	<u>View File</u>

**6.4.2** - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

**6.4.2.1** - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

2.19

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	<u>View File</u>
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

For a self-financing educational institute, the major revenue is raised from students' tuition fees i.e. semester fees. IQAC has categorized specific activities for the mobilization of funds and resources on top of the regular fund flow activities i.e. teaching-learning process.

Strategies for mobilization of funds:

- 1. Tuition fees collected from students for carrying out Teaching-Learning processes
- Add-on fees for inculcation of Professional Skills, Soft Skills, Value Added Training Programs, Industrial Training, etc.
- Grants for Research and Development activities, consultancy, organizing seminars and conferences, and faculty development programs from Government and Nongovernment bodies/industries.
- 4. Endowments for Scholarships and Awards for academic excellence
- 5. Donations from alumni/employers/stakeholders/well-wishers for specific activities
- Revenue collected from Library Fines, deduction from Caution money for replacement of equipment/infrastructure, etc.
- 7. Rental fees collected from recruiting agencies like IT companies, Banking Services, DRDO, or for academic exercises like WBJEE, IITJEE, IIT GATE, etc.
- Rental from commercial organizations like Banks and food courts located in the institution's premises mutual benefit scheme.

Optimal Utilization of Resources:

- 1. Sharing of the infrastructure working within the guidelines of the Regulatory Bodies.
- 2. Sharing of laboratories, classrooms, pedagogic tools, etc. by different departments.
- 3. Sharing of spare resources for second shift programs.
- 4. Utilization of resources by external professional bodies especially during holidays.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/page.php?id=681
Upload any additional information	<u>View File</u>

### 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

IQAC takes the onus of assuring and maintaining of quality of the academic and administrative activities of the college. Quite a few best practices have been institutionalized as a result of IQAC initiatives. Based on the present perspective and made-in-India initiatives, two recently institutionalized practices are:

1. NSEC-Incubation Center [Based on the Activities]:

The NSEC Incubation Center helps students' innovation in product development through the following supports: Mentoring (Both technical and business), Product Development, IPR creation, Market fitting, Start-up Registration& Incubation support. Team Energy Saver received 2.0 Lakh Incubation support from the AICTE. The Incubation Center is approved by the MSME, Govt. of India for which students and external innovators are also applying for funding through the NSEC Incubation Center.

1. NSEC-IEEE Student Branch and Student Branch Chapters:

NSEC has 14 student branch chapters under different societies and organized nine events in 2022 and fifteen events in 2023. Various outreach activities were conducted with industries and academic institutions. A USD 1500 grant was received by MTT SBC from the MTT society. Additionally, students received awards, travel grants, registration fees for conferences, free accommodation and travel for workshops, and best paper awards with cash.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=574
Upload any additional information	<u>View File</u>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

IQAC reviews the quality of teaching-learning by analyzing the feedback collected from the stakeholders at periodic intervals and learning outcomes from the attainment of COs, POs and PSOs. Based on the information received, incremental improvements were made in two broad areas as follows:

### 1. Effective use of ICT in teaching-learning

- 1. The majority of the classrooms and laboratories are fully equipped with ICT facilities: LAN and Wi-Fi enabled.
- 2. Audio-visual facilities have been created and Google Workspace using college domain ID is used.
- 3. Virtual Lab facilities, simulation software environment and live demonstration of experiments.
- 2. Enriching Induction Program

The program is critically designed and consists of an Orientation Programme followed by:

- 1. Industry Outreach Talks by eminent persons from various industries
- 2. Alumni sessions & master classes by stalwarts
- 3. Motivational sessions & Art of Living
- 4. General Proficiency Test Diagnostic Assessment
- 5. Boot Camp on Soft skills, cyber security and ethical hacking
- 6. Bridge course on Physics and Mathematics
- 7. Entrepreneurship development program by Wadhwani Foundation

Also, the students are made aware of the University affairs, Massive Open Online Courses (MOOCs) and Mandatory Additional Requirements (MARs) for awarding B. Tech with Honours degree from MAKAUT. A. All of the above

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=574
Upload any additional information	No File Uploaded

6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)

File Description	Documents
Paste web link of Annual reports of Institution	https://www.nsec.ac.in/page.php?id=574
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

### INSTITUTIONAL VALUES AND BEST PRACTICES

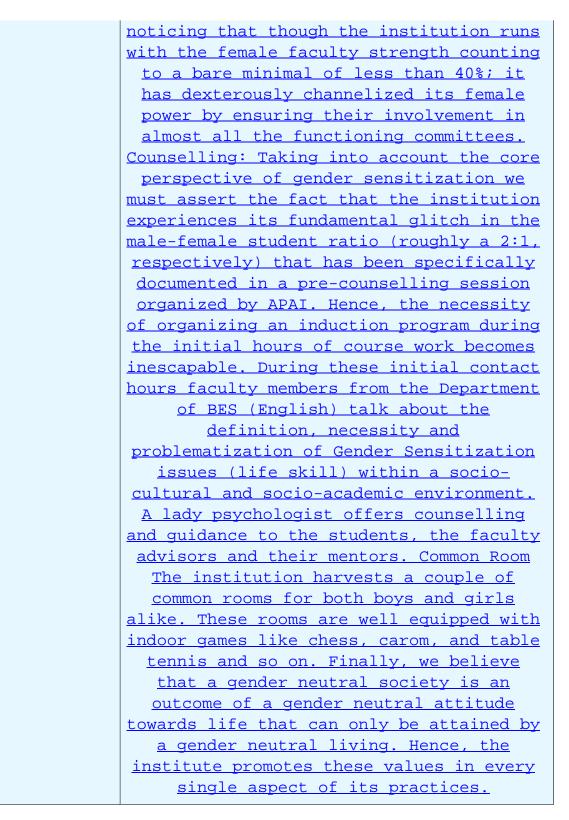
### 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

The institution religiously looks into the matter of providing academic and non-academic help to students irrespective of their socio-cultural and sexual identities and orientation. The selection process and admission are purely based on merit irrespective of gender. The institution integrates special programs for gender sensitization through an orientation cum induction program for newly admitted students. A lady psychologist offers counseling and guidance to the students, the faculty advisors and their mentors. The social issues of relationship, caste and gender discrimination are delicately discoursed through English and Language Laboratory courses in the curriculum.

The women's grievance cell of the institute looks after the issues pertaining to women in particular. The institution in collaboration with Gender Benders, a social group led by people of various layers of academic practices, organizes numerous workshops, seminars and conventions. It is worth noticing that the female faculty strength counts to a bare minimum of less than 40%; it has dexterously channeled its female power by ensuring their involvement in almost all the functioning committees. Every year, a mass awareness program on gender equity is organized on International Women's Day. Separate common rooms catering to the needs of both boys and girls are sufficiently furnished and well-maintained.

File Description	Documents
Annual gender sensitization action plan	Gender Sensitization Programme: In the context of the modern scenario, a collaborative effort was undertaken with an independent organization named Gender Benders to create a mass awareness regarding the fundamentals of gender sensitization and sex gender discrimination during orientation and induction program. Young students were appraised on the areas of mutual confusion giving rise to concerns that would have required future attention in their course of career attainment. Women's Day Celebration: On International Momen's Day, the eco-cultural club organizes a mass awareness campaign, a cultural programme followed by a paper presentation session. Every year the college puts in an effort to invite a guest speaker belonging to the core field.
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	The institution religiously looks into the matter of providing academic and non- academic help to students irrespective of their socio-cultural and sexual identities and orientation. In the following section we will try to discuss the initiatives taken up and maintained by the institution with reference to the quoted categories (educational equity, socio-cultural equity and so on): Safety and Security: To fight and annul the discrimination on the grounds of moral, physical, psychological and gender inequality the institution has successfully managed to introduced and run and anti-sexual harassment and anti- ragging committee led and guided by core academic members, besides organizing numerous workshops, seminars and conventions. We believe this is worth



7.1.2 - The Institution has facilities for alternate sources of energy and energy conservation measures Solar energy Biogas plant Wheeling to the Grid Sensorbased energy conservation Use of LED bulbs/ power efficient equipment

#### C. Any 2 of the above

File Description	Documents
Geo tagged Photographs	<u>View File</u>
Any other relevant information	<u>View File</u>

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

The routine operations conducted in the college have very little impact on the environment. The college is keenly vigilant to generate waste as low as possible. Especially design hoardings are used to minimize the usage of natural resources; water, electricity, etc. However, regarding waste management following measures are taken:

1. Solid Waste Management:

Solid wastes generated from different sources are segregated through colour-specific waste bins. Disposal carried out through local civic authorities.

- Green Waste-bins for biodegradable wastes
- Blue Waste-bins for non-biodegradable wastes
- Red Waste-bins for specific laboratories
- 1. Liquid Waste Management:

Sewage and effluents from the canteen are discharged through a normal sanitary system. Laboratory waste particularly in Chemistry and environmental laboratories is disposed of with special care and proper precautions.

1. E-Waste Management:

This includes motherboards, memory chips, compact discs, cartridges, batteries, etc. generated by electronic equipment such as Computers, Phones, Printers, UPS, Fax and Photocopy machines. The E-wastes thus generated are recycled as far as possible and usages of spare parts from old machines are diligently practiced. However, E-waste generated from hardware and condemned materials that cannot be reused or recycled are stored in a separate safe zone and disposed of centrally through scrap dealers and authorized vendors.Hazardous Chemical, Biomedical and Radioactive waste are nil.

File Description	Documents
Relevant documents like agreements / MoUs with Government and other approved agencies	<u>View File</u>
Geo tagged photographs of the facilities	No File Uploaded

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 B. Any 3 of the above

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

## 7.1.5 - Green campus initiatives include

## 7.1.5.1 - The institutional initiatives for 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
Geo tagged photos / videos of the facilities	<u>View File</u>
Various policy documents / decisions circulated for implementation	<u>View File</u>
Any other relevant documents	<u>View File</u>

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

C. Any 2 of the above

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus recognitions/awards 5. Beyond the campus environmental promotional activities

File DescriptionDocumentsReports on environment and<br/>energy audits submitted by the<br/>auditing agencyNo File UploadedCertification by the auditing<br/>agencyView FileCertificates of the awards<br/>receivedNo File UploadedAny other relevant informationView File

7.1.7 - The Institution has disabled-friendly, B. Any 3 of the above barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft copies of reading material, screen reading

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

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

The institution provides an inclusive environment with no discrimination among different religions, castes, languages, genders, cultures, or economic status. It offers equal opportunity to everyone right from the very first day i.e., the admission is strictly based on merit. Starting from the Firstyear induction program, these values are emphasized and frequently organized awareness programs. In addition, suitable posters and displays are spread all over the campus regarding gender equity, brotherhood and behavioral improvement. The institute celebrates cultural and regional festivals to teach tolerance and harmony to the students.

All-round development of students is encouraged through mentoring, guidance and participating in Rotaract community services, Hackathons, Tech Fest, etc. A sizeable number of students are from other states. The students' sports club, photography club and the literacy club organized different activities to promote harmony towards each other. International Women's Day, Yoga Day, etc. celebrations also promote tolerance and harmony. Anti-ragging Cells are instituted to take care of ragging issues. A two-tier disciplinary Committee - at the Departmental level and the institute level takes care of gross indiscipline among the students. The anti-sexual Harassment Cell chaired by a female faculty looks into all sexual indiscrimination cases in the College.

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

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

The first step towards sensitization of students and employees of the institution to the constitutional obligations is the formulation of rules and regulations approved by the Board of Governors, strict observance of the rules, and constitution of a Grievance Redressal Cell in case of any violation. The rules and regulations are so framed that they apply to all irrespective of gender, creed and culture. Right to Information Cell takes care of the maintenance of transparency.

The employees are mature enough to know their rights, duties and responsibilities as citizens. It is the students who are still young needing awareness programs. The awareness starts from the conduction of the Induction program. They are told about their values, rights, duties and responsibilities as citizens of India. Further input comes from the classroom teaching and the curriculum includes a compulsory course on the Constitution of India or the Essence of Indian Knowledge Tradition. The institute celebrates Independence Day, Republic Day, Netaji Jayanti, Gandhi Jayanti and Constitution Day to mark the importance of freedom and the glory of Indian freedom fighters. The institute also arranges Blood Donation Camp to save lives, celebrates Women's Day to mark the achievements of women and World Environment Day to aware of pollution issues.

	National Technology Day Event Name: Two Day Boot Camp on Finance and Go To Market Strategy Date: 11th & 12th May, 2023 Venue: H204 and Incubation Center Celebrating World Environment Day Event Name: "RELEAF" A Tree Plantation Drive on the occasion of World Environment Day Date: 05.6.2023 Venue: College Campus Faculty Coordinator: Prof. Indranil Ghosh Celebrating YOGA Day Event Name: Celebrating YOGA Day Through the Workshop on YOGA Date: 21.6.2023 Venue: APC Hall Faculty Coordinator: Prof. Sukumar Roy
Any other relevant information	Celebrating 76th Independence Day Event Name: Celebration of Independence Day Date: 15.8.2023 Venue: College Campus Faculty Coordinator: Prof. Indranil Ghosh Event Description: The Eco Cultural Club of Netaji Subhash Engineering College in association with the Institution's Innovation Council (IIC) organized a celebration event including Flag Hoisting, Lecture on 76th Independence Day and other cultural events at the campus ground on 15th August, 2023, on the occasion of 76th Independence Day where Director, Principal, dean, HODs and other faculty members are present. No. of Student Involved: 70 No. of Faculty Involved: 42

B. Any 3 of the above

7.1.10 - The Institution has a prescribed code of conduct for students, teachers, administrators and other staff and conducts periodic programmes in this regard. The Code of Conduct is displayed on the website There is a committee to monitor adherence to the Code of Conduct Institution organizes professional ethics programmes for students, teachers, administrators and other staff 4. Annual awareness programmes on Code of Conduct are organized

File Description	Documents
Code of ethics policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

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

Various festivals are celebrated on the college campus such as Holi, Bengali New Year, Rabindra-Jayanti, Monsoon-onset (Borshamongol), Dussera (Bijoya Dasami) etc. The greatest of all the celebrations take place on the birth anniversary of Netaji Subhash Chandra Bose, which happens to be the Foundation Day of the college. A cultural program is organized preceded by the hoisting of the flag and march-past by the security personnel of the college, keeping in mind the patriotic essence of the day. Moreover, the college takes this auspicious opportunity to give away prizes of excellence to students and faculty members, and other staff.

Students organize and participate in competitions, cultural events and college fests through various institutional clubs, the biggest of all being 'Avenir', the tech-fest organized by tech club Phoenix. This gala event is a three-day extravaganza, showcasing the creative talents of the students on a wider platform.

International Women's Day is celebrated to highlight the achievements of women. The students enthusiastically design and display posters on the theme. The day also marks a call to action for accelerating gender parity. The college also celebrates Teachers Day, Environment Day, Earth Day, World Water Day, National Science Day, Innovation Day, Engineers' Day, etc. every year.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged photographs of some of the events	No File Uploaded
Any other relevant information	<u>View File</u>

#### 7.2 - Best Practices

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

Best Practices:1

```
1. Title of the Practice
```

NSEC-Incubation Center [Based on the Activities]

#### 2. Objectives of the Practice

NSEC-Incubation Center has been established to support start-up creation from the students' innovation.

3. The Context

The establishment of the Institution's Innovation Council (IIC) at every HEIs by the MoE's Innovation Cell helps to foster the innovation culture at the campus leading to the development of innovative projects by the students.

#### 4. The Practice

The NSEC Incubation Center helps students' innovation in product development through the following supports:

- Mentoring (Both technical and business)
- Product Development
- IPR creation
- Market fitting

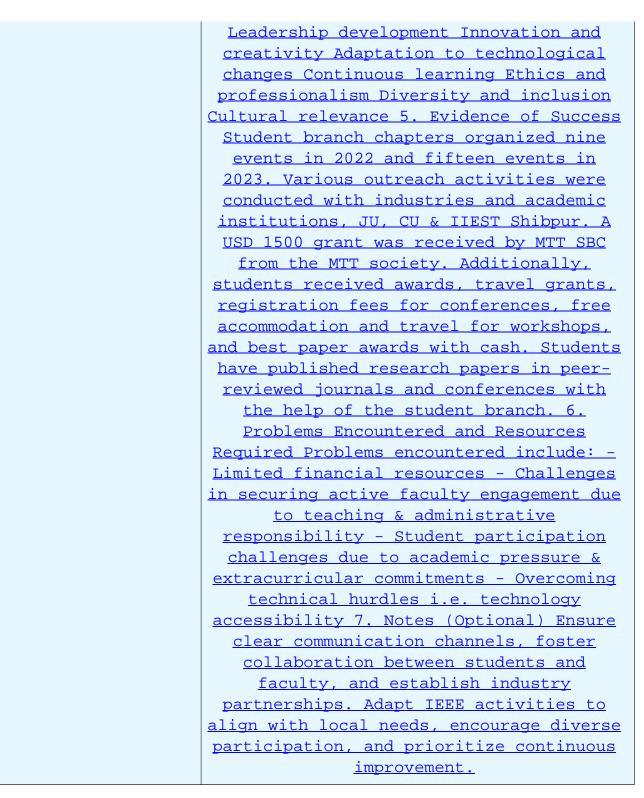
- Start-up Registration
- Incubation support
- 5. Evidence of Success

Team Energy Saver received 2.0 Lakh Incubation support from the AICTE. The Incubation Center is approved by the MSME, Govt. of India for which students and external innovators are also applying for funding through the NSEC Incubation Center.

6. Problems Encountered and Resources Required

The primary problem is the funding for establishing a fabrication lab and purchasing of latest equipment. Another problem is to provide market-fitting product manufacturing facilities.

File Description	Documents
Best practices in the Institutional website	<pre>www.nsec.ac.in/page.php?id=612</pre>
Any other relevant information	Best Practices:2 1. Title of the Practice NSEC-IEEE Student Branch and Student Branch Chapters 2. Objectives of the Practice Inspire and empower student members to showcase and enhance their technical skills and innovation for the benefit of humanity. 3. The Context Students can enhance their knowledge outside the classroom and learn from peers, experts and professionals and opportunity to be exposed to the latest technology. Additionally, improve their soft and hard skills. The contextual features are addressed through strategic planning, collaboration, and commitment to continuous improvement. 4. The Practice NSEC has 14 student branch chapters under different societies and arranged several workshops, seminars and technical sessions with the common consideration: Professional development Industry collaboration Student project and competition Community engagement



#### 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Industry oriented skill based certification programmes and internship is one the most envisioned area of the institute. The institute signed MoUs with SunEco Tech Venture Pvt. Ltd, Google Asia Pacific Pte. Ltd. and National Institute of Electronics & Information Technology (NIELIT) for skill based certification programs and internship. Under this venture, 25 students trained with skill enhancement program through SunEco Tech Venture Pvt. Ltd., 550 students completed skill enhancement program conducted by Google Asia Pacific Pte. Ltd., and 185 students completed certification course on block chain technology from NIELIT. Fourteen faculty members certified as Training of Trainers [TOT] for Introduction to Blcokchain Technology from NIELIT.

A significant number of final year students grabbed internship and have started on job training programs in different industries as follows:

Dell Technologies:01

Hexaware: 08

Intel Corporation: 04

Johnson Control: 02

Keysight Technology: 01

Labvantage: 04

Lechler (India) Pvt. Ltd.: 01

Minsol Limited.: 01

NRIFT: 02

Polestar: 02

RDC Concrete: 01

RT Camp: 01

Rxefy Tech Pvt. Ltd.: 01

Agarpara Jute Mill Ltd.: 03

Calsoft: 01

Shri Mahavir FEPRO Alloys: 04

Tiger Analytics: 01

Titagarh Wagons: 04

Valuemomentum: 16

Vara Infrovate: 02

Aditya Birla: 04

Virtusa: 37

Xenonstack: 04

## Part B

## **CURRICULAR ASPECTS**

## **1.1 - Curricular Planning and Implementation**

1.1.1 - The Institution ensures effective curriculum delivery through a well planned and documented process

The curriculum delivery is one of the institutional strategic goals to create and maintain an environment for imparting knowledge, skills, concepts, processes, values and attitudes necessary for learners. Conscious and consistent efforts are put to bring about desirable changes in students' learning, abilities and behaviour. Institute prepare academic calendar in line with affiliated university. The course teacher prepare course file, familiarize the students with lesson plan, course objectives and outcomes at the onset of each semester. Lessons are delivered as per the routine followed by presentation with visual aid and teaching through smart techniques. Tutorial classes, laboratory experiments are conducted as per the routine and provide design based assignments and project works. Internal test, quizzes and group discussion are held at regular interval. Remedial classes for weaker students and special classes for brighter students are arranged. Soft skill, aptitude classes are accommodated in the time table. Value added training, industry visit and internship are provided to the students.

Institute formulate "Ready Reckoner" comprises of description of academic activities, target date, performers and reviewing / supervising / monitoring authority. Students' performances are documented, results are analysed, and attainments are calculated. Teachers modify the lesson plan based on the students' feedback.

File Description	Documents	
Upload relevant supporting document	<u>View File</u>	
Link for Additional information	https://www.nsec.ac.in/images/Academic- Activities-A-Ready-Reckoner.pdf	

1.1.2 - The institution adheres to the academic calendar including for the conduct of Continuous Internal Evaluation (CIE)

The institute prepares the academic calendar to ensure academic discipline and smooth conduction of the continuous internal evaluation process. For the preparation of the detailed academic schedule, the institute depends on the affiliated University calendar. The institute has also developed a structured format "Academic Activities: A Ready Reckoner" to all, which lists component-wise academic activities to be performed during the odd and even semester program including the time limit for each work, name of the person responsible and the supervising authority.

Four continuous assessments (CAs) for theory courses and two continuous assessments (PCAs) for laboratory courses are accommodated in the academic calendar for each semester. Normally, two unit tests are considered for any two continuous assessments and the other two from the assignments, quizzes, etc.

The Internal Quality Assurance Cell (IQAC) continuously monitors and evaluates the internal evaluation mechanism and plays a pivotal role in enhancing the teaching-learning process by ensuring quality in all operations. The recommendations from various committees and the management are accounted and subsequently, corrective actions are undertaken. Based on the requirement, IQAC cell also formulates quality benchmark policies for improving quality in continuous internal evaluation and for proper implementation of outcome-based education.

File Description	Documents	
Upload relevant supporting document	<u>View File</u>	
Link for Additional information	https://www.nsec.ac.in/page.php?id=557	
1.1.3 - Teachers of the Institution participate in following activities related to curriculum development and assessment of the affiliating University and/are represented on the following academic bodies during the year. Academic council/BoS of Affiliating University Setting of question papers for UG/PG programs Design and Development of Curriculum for Add on/		A. All of the above

View File

certificate/ Diploma Courses Assessment /evaluation process of the affiliating University			
	File Description	Documents	Documents
	Details of participation of teachers in various	<u>View File</u>	

response to the metric	
Any additional information	

## **1.2 - Academic Flexibility**

bodies/activities provided as a

## **1.2.1** - Number of Programmes in which Choice Based Credit System (CBCS)/ elective course system has been implemented

## 1.2.1.1 - Number of Programmes in which CBCS/ Elective course system implemented

#### 15

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

#### 1.2.2 - Number of Add on /Certificate programs offered during the year

**1.2.2.1** - How many Add on /Certificate programs are added during the year. Data requirement for year: (As per Data Template)

## 40

File Description	Documents
Any additional information	<u>View File</u>
Brochure or any other document relating to Add on /Certificate programs	<u>View File</u>
List of Add on /Certificate programs (Data Template )	<u>View File</u>

## **1.2.3** - Number of students enrolled in Certificate/ Add-on programs as against the total number of students during the year

9	1	9
_	_	-

File Description	Documents	
Any additional information	<u>View File</u>	
Details of the students enrolled in Subjects related to certificate/Add-on programs	<u>View File</u>	

## **1.3 - Curriculum Enrichment**

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

Different cross-cutting societal issues are addressed by the institution through courses in the curriculum, various bodies, programs and policies. The institution has taken much care to introduce a culture of expressing controlled behaviour, discipline, gender sensitization, environmental awareness, moral values, healthy relationship, empathy and sympathy.

The institution caters to all the students from a heterogeneous socio-cultural background; introducing the idea of gender sensitization from the very early days through the Orientation and Induction Program. The social issues about relationships, caste, declining sex ratio, eve-teasing, racism, sexism, etc. are delicately discoursed through English, Language Laboratory and Universal Human Values courses in the curriculum. Awareness programs on gender equality and women's empowerment are undertaken through guest lectures by eminent social workers and psychometric counseling.

The course curriculum is also integrated with Environmental Sciences and Biology for Engineers. Students are well exposed to ecosystems, biodiversity and its conservation, renewable and non-renewable resources, environmental pollution and management, and pollution control acts. Assignments on home energy saving, green home project, home water saving, rainwater harvesting, best use of recycling services, organic waste, composting, toxins/pollution prevention, waste and consumption, and sustainable living. Campus clean, ecorallies and green abhiyyan programs are conducted under Swachh Bharat.

File Description	Documents
Any additional information	<u>View File</u>
Upload the list and description of courses which address the Professional Ethics, Gender, Human Values, Environment and Sustainability into the Curriculum.	<u>View File</u>

# **1.3.2** - Number of courses that include experiential learning through project work/field work/internship during the year

## 121

File Description	Documents
Any additional information	<u>View File</u>
Programme / Curriculum/ Syllabus of the courses	<u>View File</u>
Minutes of the Boards of Studies/ Academic Council meetings with approvals for these courses	No File Uploaded
MoU's with relevant organizations for these courses, if any	<u>View File</u>
Institutional Data in Prescribed Format	<u>View File</u>

## 1.3.3 - Number of students undertaking project work/field work/ internships

84

File Description	Documents	
Any additional information	<u>View File</u>	
List of programmes and number of students undertaking project work/field work/ /internships (Data Template)	<u>View File</u>	
1.4 - Feedback System		

1.4.1 - Institution obtains feedback on the A. All of the above

syllabus and its transaction a institution from the following stakeholders Students Teach Employers Alumni	5		
File Description	Documents          https://nsec.ac.in/impdoc/agar2022-23/1         41FeedBackDatabase2022-23.pdf		
URL for stakeholder feedback report			
Action taken report of the Institution on feedback report as stated in the minutes of the Governing Council, Syndicate, Board of Management	<u>View File</u>		
Any additional information		<u>View File</u>	
1.4.2 - Feedback process of the may be classified as follows	he Institution A. Feedback collected, analyzed and action taken and feedback available on website		
File Description	Documents         View File         https://nsec.ac.in/impdoc/agar2022-23/1         42StudentsFeedbackEvenSemester2022-2023         .pdf		
Upload any additional information			
URL for feedback report			
TEACHING-LEARNING AN	D EVALUATI(	DN	
2.1 - Student Enrollment and	Profile		
2.1.1 - Enrolment Number N	umber of stude	ents admitted during the year	
2.1.1.1 - Number of students	admitted durir	ng the year	
693			
File Description	Documents		
Any additional information		<u>View File</u>	
Institutional data in prescribed format	<u>View File</u>		
2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST,			

2.1.2 - Number of seats filled against seats reserved for various categories (SC, ST,

# **OBC**, Divyangjan, etc. as per applicable reservation policy during the year (exclusive of supernumerary seats)

**2.1.2.1 -** Number of actual students admitted from the reserved categories during the year

#### 127

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

## 2.2 - Catering to Student Diversity

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

Assessment of the learning level of the students is a continuous process which is pursued throughout the program. The students admitted to programs are from diverse backgrounds with different mindsets. In the very first day of orientation cum induction program, students are encouraged to express their problems and elicit other information for the engineering program. The teachers analyze the problems of students especially those who come from non-English medium. An assessment test is carried out to determine the student's potential to achieve their goal. A structured multiple-choice question format based on Mathematics, Physics & Chemistry in three grades (easy, moderate and tough) with negative marking and an English questionnaire to evaluate the student's ability to communicate clearly and accurately in ascientific fashion with fluid and cohesive arguments.

The progress of the students is continuously monitored and evaluated through interactive classroom teaching, daily activities, feedback from the subject teachers and performance in internal tests, assignments, quizzes and endsemester examinations. From the above assessment, the slow and advanced learners are identified. Subsequently, both categories of students are channelized through separate special programs viz. mentoring system, special coaching, remedial classes, soft skill and aptitude classes, MOOCs courses, Gate tutor, etc.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/impdoc/agar2022-23/2 21Policy_SlowLearnerandAdvancedLearners pdf
Upload any additional information	<u>View File</u>

#### 2.2.2 - Student- Full time teacher ratio (Data for the latest completed academic year)

Number of Students		Number of Teachers
2772		189
File Description	Documents	
Any additional information		<u>View File</u>

## 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

The institute focuses on student-centric learning and provides a creative learning environment so that students can think independently and interact with teachers and peers. The university curriculum provides sufficient scope for experimental learning which the institute has fully exploited. The institute has also evolved several innovative techniques to enhance the experimental learning of the students such as learning through observation, value-added training programs, extramural laboratory practices, simulation-based laboratories, team-based project work, programming proficiency development programs, tech-oriented courses in collaboration with professional bodies, industry visit and internship.

Participative learning develops an aptitude for self-learning and enhances the creativity of the students. The methods and policies adopted are: teaching through smart techniques, teaching while you learn, seminar and PPT presentations, and technical events. Active participation in organizing Technical seminars, Tech Fest, Cultural Programs aids in the development of their managerial, leadership and teamwork capabilities. IIC and EDC cells inculcate the spirit of innovation and entrepreneurship, support start-up creation through guidance and mentorship, and arrange idea-toprototype competitions, prototype realization competitions and Hackathons. The analytical and problem-solving abilities of the students are enhanced through design-based assignments and industry-related issues, extensive tutorial work, social services in groups and collaboration.

File Description	Documents
Upload any additional information	<u>View File</u>
Link for additional information	https://nsec.ac.in/impdoc/agar2022-23/2 62 Attainment impdoc 262 Attainment.pdf

2.3.2 - Teachers use ICT enabled tools for effective teaching-learning process. Write description in maximum of 200 words

The college has adopted ICT in its teaching-learning process two decades back. The use of computers, laptops and the Internet has become a common practice for teachers and students. The college has ICT-enabled classrooms which helps the e-learning process. The library is automated and accessible to e-resources vide LIBSYS with unlimited user login. The digital library is a rich collection of NPTEL video lectures and a subscription of several e-books, and ejournals. The entire campus is Wi-Fi enabled which helps students stay connected to the internet for updated information and tech-oriented learning. Teachers try to make the possible use of technology to improve the teachinglearning process.

Once the COVID-19 pandemic affected traditional teachinglearning, the IQAC immediately felt the need for digital teaching-learning and initiated the process of implementation. The entire faculty fraternity efficiently adopted online platforms and created digital classrooms using G-Meet and Zoom. They have developed e-content and used eresources. Laboratory experiments were conducted using virtual Lab facilities, simulation software and life demonstration. Concerned faculty members provided study materials and assignments in Google Classroom and took quizzes at regular intervals. Teachers effectively used ICTenabled tools and resources viz. laptops, smartphones, headphones, virtual boards, internet, video-lectures, audiolectures, PPT, YouTube links, e-contents, etc.

File Description	Documents
Upload any additional information	<u>View File</u>
Provide link for webpage describing the ICT enabled tools for effective teaching- learning process	<u>View File</u>

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

## 2.3.3.1 - Number of mentors

#### 94

File Description	Documents
Upload, number of students enrolled and full time teachers on roll	<u>View File</u>
Circulars pertaining to assigning mentors to mentees	<u>View File</u>
Mentor/mentee ratio	<u>View File</u>

## 2.4 - Teacher Profile and Quality

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

#### 189

File Description	Documents
Full time teachers and sanctioned posts for year (Data Template)	<u>View File</u>
Any additional information	No File Uploaded
List of the faculty members authenticated by the Head of HEI	<u>View File</u>

2.4.2 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.B Superspeciality / D.Sc. / D.Litt. during the year (consider only highest degree for count)

2.4.2.1 - Number of full time teachers with Ph. D. / D.M. / M.Ch. /D.N.C Superspeciality / D.Sc. / D.Litt. during the year

#### 61

File Description	Documents
Any additional information	<u>View File</u>
List of number of full time teachers with Ph. D. / D.M. / M.Ch./ D.N.B Super specialty / D.Sc. / D.Litt. and number of full time teachers for year (Data Template)	<u>View File</u>

## **2.4.3** - Number of years of teaching experience of full time teachers in the same institution (Data for the latest completed academic year)

## 2.4.3.1 - Total experience of full-time teachers

#### 1977

File Description	Documents
Any additional information	No File Uploaded
List of Teachers including their PAN, designation, dept. and experience details(Data Template)	<u>View File</u>

#### 2.5 - Evaluation Process and Reforms

2.5.1 - Mechanism of internal assessment is transparent and robust in terms of frequency and mode. Write description within 200 words.

Internal assessments are carried out as per the schedule in the academic calendar. The institute conducts four continuous assessments (CAs) of 25 marks for theory courses and two continuous assessments (PCAs) of 40 marks for laboratory courses each semester. Normally, two unit tests are considered for any two CAs and the rest two from the assignments, quizzes, etc.

Theory courses:

- Course Outcomes (COs) based question paper for unit tests.
- Answer scripts are evaluated and shown to the students within 7 days.
- Answers are discussed in detail.
- Tabulated marks are displayed within the next 2 days.

Laboratory practices:

- Laboratory reports are evaluated and shown by the next lab day.
- Marks were awarded for each experiment and handed over to the students along with the corrected laboratory reports.

Sessionals:

- Rubrics-based assessment for all assignments.
- Weightages are given on attendance, a notebook showing the progress of sessional work, final report and viva voce.

Projects/Seminar:

- The assessment is based on rubrics that clearly outline the different evaluation criteria and the quality/score
- Weightages are given to creativity, originality, uniqueness and practical benefit aspects of the project, if any.
- Mid-term progress evaluation carried out through PowerPoint presentation and report submission.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	https://makautwb.ac.in/rti/First%20Rule s%20and%20Regulations%20of%20WBUT.pdf

2.5.2 - Mechanism to deal with internal examination related grievances is transparent, timebound and efficient

The examination-related grievances are handled by the institute to the extent that is possible under its jurisdiction. As the institute is responsible only for the internal assessment part, any grievances are dealt with internally. If there is any dispute related to the mechanism of the internal evaluation system then that is referred to the head of the departments (HODs) as well as the mentor for an amicable solution.

Since internal assessment is very transparent, the grievances are few and their occurrence probability is also low.

However, if any such grievance arises related to sessional, practical or unit tests, all are dealt with by the faculty concerned almost immediately. In general checking of the unit test answer scripts is completed within 7 days and the corrected scripts are shown to the students for clarification of doubts, if any. Finally, the unit test marks are published and displayed within the next 2 days. If any student is not satisfied with the marks awarded even after clarification by the teacher concerned, the student may appeal to the concerned HOD through the mentor. The HOD takes necessary measures for reassessment of the answer scripts within a week. Assignments and practical reports are checked and marks are awarded within one week.

File Description	Documents
Any additional information	<u>View File</u>
Link for additional information	http://nsec.edugrievance.com/

#### 2.6 - Student Performance and Learning Outcomes

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

The primary and fundamental component of outcome-based education is the attainment of course outcomes (COs) and is calculated from students' performance in internal continuous assessments and end-semester university examinations. The course outcomes represent the resultant knowledge, skills and attitudes the student acquires from the course. The course coordinator has defined the course outcomes in consultation with stakeholders if not mentioned in the university syllabus and the number of course outcomes is around six for each course. While writing course outcomes, Bloom's Taxonomyof Cognitive Skill is considered. These learning outcomesclearly describe the meaningful, observable and measurable knowledge, skills and/or dispositions students should able to do at the end of the course.

Program Outcomes (POs) represent the knowledge, skills and attitudes the students should possess at the end of graduation. There are twelve such graduate attributes irrespective of the programs defined by the National Board of Accreditation (NBA), India. The program-specific outcomes (PSOs) are explicit graduate attributes for a particular program and are around three for each program defined by the department. The course teacher prepares course files and familiarizes the students with lesson plans, course objectives and outcomes at the onset of each semester.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://nsec.ac.in/page.php?id=142
Upload COs for all Programmes (exemplars from Glossary)	<u>View File</u>

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

One of the important aspects of Outcome-Based Education (OBE) is the assessment of students' performance and achieving the set attainment for course outcomes (COs) and Program Outcomes (POs). COs define the qualities attained by the students on completion of a particular course in each semester. POs are the twelve graduate attributes defined by the NBA. The level of CO attainment is measured by the marks scored in internal continuous assessment (X) and University examination (Y). The institute sets the attainment levels based on the actual percentage of students getting a set percentage of marks. Each question is mapped with COs which effectively helps to determine the achievement of each student. The final course attainment as per the set percentage of marks for the theory and laboratory courses is as: Theory courses = 0.7\*X + 0.3\*Y and Laboratory courses = 0.6\*X + 0.4\*Y.

All COs are mapped with POs and attainment of POs is calculated from direct assessment (DA) and indirect assessment (IA). The total attainment of each PO is calculated as: Total Attainment (TA) = 0.8\*DA + 0.2\*IA. The results are analyzed and the institution adopts methodology to improve upon any PO, if needed, through revision of the program, review of pedagogic method, extramural training and feedback.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for Additional information	https://nsec.ac.in/impdoc/agar2022-23/2 62_Attainment_impdoc_262_Attainment.pdf

## 2.6.3 - Pass percentage of Students during the year

**2.6.3.1** - Total number of final year students who passed the university examination during the year

#### 610

File Description	Documents
Upload list of Programmes and number of students passed and appeared in the final year examination (Data Template)	<u>View File</u>
Upload any additional information	<u>View File</u>
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://nsec.ac.in/impdoc/aqar2022-23/SSS\_2024.pdf

#### **RESEARCH, INNOVATIONS AND EXTENSION**

**3.1 - Resource Mobilization for Research** 

**3.1.1 - Grants received from Government and non-governmental agencies for research** projects / endowments in the institution during the year (INR in Lakhs)

**3.1.1.1 - Total Grants from Government and non-governmental agencies for research** projects / endowments in the institution during the year (INR in Lakhs)

2.32

File Description	Documents
Any additional information	<u>View File</u>
e-copies of the grant award letters for sponsored research projects /endowments	<u>View File</u>
List of endowments / projects with details of grants(Data Template)	<u>View File</u>

**3.1.2** - Number of teachers recognized as research guides (latest completed academic year)

## 3.1.2.1 - Number of teachers recognized as research guides

28

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

# **3.1.3** - Number of departments having Research projects funded by government and non government agencies during the year

## **3.1.3.1** - Number of departments having Research projects funded by government and non-government agencies during the year

1

File Description	Documents
List of research projects and funding details (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>
Supporting document from Funding Agency	<u>View File</u>
Paste link to funding agency website	https://main.icmr.nic.in/

## **3.2 - Innovation Ecosystem**

3.2.1 - Institution has created an ecosystem for innovations and has initiatives for creation and transfer of knowledge

The institute encourages the creative energy of the students to work on new ideas and innovation. The major focuses are to create a vibrant local innovation ecosystem and to develop better cognitive ability for technology students. The NSEC Entrepreneurship Development Cell (EDC-NSEC) started its journey to inculcate the spirit of innovation and entrepreneurship amongst young students and encourage and support start-up creation through guidance, mentorship and support. The cell would also spread the message of entrepreneurship and create a culture of entrepreneurship at the NSEC campus and beyond.

The Institute Innovation Council (IIC) has been constituted as prescribed by MHRD-IIC to methodically foster the culture of innovation as a part of the curriculum. The council encourages, inspires and nurtures the talent of young and creative students to work on new ideas leading to establishing an innovative ecosystem in the campus. The young and innovative minds are attracted through expert talk sessions, periodic workshops/ seminars/ interactions with entrepreneurs, investors, and professionals. Several Hackathons, idea competitions, and mini-challenges with the involvement of industries are arranged for active involvement and even encourage the students to participate at national and state levels. Few amongst the "Job-Seekers" would be converted to "Job- Generators" through the entrepreneurial route.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nsec.ac.in/page.php?id=601

**3.2.2** - Number of workshops/seminars conducted on Research Methodology, Intellectual Property Rights (IPR) and entrepreneurship during the year

**3.2.2.1 - Total number of workshops/seminars conducted on Research Methodology,** Intellectual Property Rights (IPR) and entrepreneurship year wise during the year

31

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
List of workshops/seminars during last 5 years (Data Template)	<u>View File</u>

#### **3.3 - Research Publications and Awards**

#### 3.3.1 - Number of Ph.Ds registered per eligible teacher during the year

## **3.3.1.1** - How many Ph.Ds registered per eligible teacher within the year

1

File Description	Documents
URL to the research page on HEI website	https://www.nsec.ac.in/page.php?id=556
List of PhD scholars and their details like name of the guide , title of thesis, year of award etc (Data Template)	<u>View File</u>
Any additional information	<u>View File</u>

**3.3.2** - Number of research papers per teachers in the Journals notified on UGC website during the year

**3.3.2.1** - Number of research papers in the Journals notified on UGC website during the year

#### 37

File Description	Documents
Any additional information	<u>View File</u>
List of research papers by title, author, department, name and year of publication (Data Template)	<u>View File</u>

**3.3.3** - Number of books and chapters in edited volumes/books published and papers published in national/ international conference proceedings per teacher during the year

3.3.3.1 - Total number of books and chapters in edited volumes/books published and

#### papers in national/ international conference proceedings year wise during year

55

File Description	Documents
Any additional information	<u>View File</u>
List books and chapters edited volumes/ books published (Data Template)	<u>View File</u>

#### **3.4 - Extension Activities**

3.4.1 - Extension activities are carried out in the neighborhood community, sensitizing students to social issues, for their holistic development, and impact thereof during the year

The institute firmly believes that education is not only confining to classroom activities of students but also sensitizing them to understand the people's life in the society and improve the living of the underprivileged. The objective lies in taking action through community and services in creating head-on sustainable solutions to local and world challenges. The students and faculty members regularly conduct various extension activities in the neighboring community mainly through NSS Unit and NSEC-Rotaract Club. The institute has also adopted five villages under Unnat Bharat Abhiyan along with the existing social activities.

Participation in extension activities transforms the outlook of students and enlightens the spirit of social responsibility to create a peaceful society. The Rotaract community looks forward to expanding their professional network and exchanging ideas to cultivate life-long global friendships and highlighting the importance of community service as well as self-service. Several initiatives were taken by the club to provide essentials such as Cloth Donation and drawing competitions to underprivileged children, distributing food packages, drawing accessories and stationaries to orphans, tree plantation and blood donation camp.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=585
Upload any additional information	<u>View File</u>

**3.4.2** - Number of awards and recognitions received for extension activities from government / government recognized bodies during the year

**3.4.2.1** - Total number of awards and recognition received for extension activities from Government/ Government recognized bodies year wise during the year

21

File Description	Documents
Any additional information	<u>View File</u>
Number of awards for extension activities in last 5 year (Data Template)	<u>View File</u>
e-copy of the award letters	<u>View File</u>

3.4.3 - Number of extension and outreach programs conducted by the institution through NSS/NCC/Red cross/YRC etc., ( including the programmes such as Swachh Bharat, AIDS awareness, Gender issues etc. and/or those organized in collaboration with industry, community and NGOs ) during the year

3.4.3.1 - Number of extension and outreach Programs conducted in collaboration with industry, community and Non- Government Organizations through NSS/ NCC/ Red Cross/ YRC etc., during the year

25

File Description	Documents
Reports of the event organized	<u>View File</u>
Any additional information	<u>View File</u>
Number of extension and outreach Programmes conducted with industry, community etc for the during the year (Data Template)	<u>View File</u>

**3.4.4** - Number of students participating in extension activities at 3.4.3. above during year

3.4.4.1 - Total number of Students participating in extension activities conducted in collaboration with industry, community and Non- Government Organizations such as Swachh Bharat, AIDs awareness, Gender issue etc. year wise during year

#### 2077

File Description	Documents
Report of the event	<u>View File</u>
Any additional information	<u>View File</u>
Number of students participating in extension activities with Govt. or NGO etc (Data Template)	<u>View File</u>

# 3.5 - Collaboration

**3.5.1** - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship during the year

**3.5.1.1** - Number of Collaborative activities for research, Faculty exchange, Student exchange/ internship year wise during the year

#### 42

File Description	Documents
e-copies of related Document	<u>View File</u>
Any additional information	<u>View File</u>
Details of Collaborative activities with institutions/industries for research, Faculty	<u>View File</u>

**3.5.2** - Number of functional MoUs with institutions, other universities, industries, corporate houses etc. during the year

**3.5.2.1** - Number of functional MoUs with Institutions of national, international importance, other universities, industries, corporate houses etc. year wise during the year

3

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

# INFRASTRUCTURE AND LEARNING RESOURCES

# 4.1 - Physical Facilities

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

According to AICTE and affiliated University norms, the physical facilities and infrastructures have been established to support and boost teaching-learning in conformity with best academic practices. The campus is spread over 20.29 acres of land with 6,575 square meters of free/air space, facilitating teaching-learning, career progression, and research. Each department has adequate physical space and academic infrastructure, offering an attractive environment for imparting quality education.

The classrooms are well-furnished, ventilated and spacious, the majority of the classrooms are equipped with computers, LCD, webcam, headphones, LAN, and Wi-Fi connectivity. All laboratories are well-equipped and well-maintained with added facilities for conducting extramural experiments. All departments have an adequate number of computer laboratories along with one central computer laboratory. Some laboratories are equipped with virtual facilities and simulation software for live demonstration of experiments. The college has two state-of-the-art English communication labs, graphics halls, an AutoCAD lab and workshops. The institution has a multimedia centre equipped with audio-visual equipment and a Webinar centre for video conferencing. Central and departmental laboratories are equipped with adequate numbers of instructional resources. Seminar halls and auditoriums have LCD facilities and adequate seating capacity. The campus is LAN and Wi-Fi enabled, and students can access the internet at any point.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nsec.ac.in/page.php?id=517

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

Sports are an integral part of education with simultaneous and holistic development of the mental and physical health of the students. The huge green-field college playground is the place for outdoor sports facilities including a football court, volleyball court, tennis court, cricket pitch and open space for yoga, etc. A small construction in the same area accommodates a gymnasium and drinking water plant for supplying neighbouring locality at a very nominal cost. The indoor arrangement within the campus comprises of a badminton court, table tennis, carom, chess, etc. Sports club organizes different sports tournaments and conducts annual sports where a large number of students and faculties participate in the same. The winners are provided with honours like medals, certificates and trophies. Students are provided with the necessary support to participate in inter-college tournaments and university sports programs.

The institution is committed to creating a balanced atmosphere between cultural and sports activities. The cultural club conducts various cultural events, literary activities and competitions around the year for students. The college encourages the students to participate in various cultural activities and motivates them to excel in their fields of interest like singing, recitation, sketching, dancing, theatres, short films, photography, etc. The indoor area accommodates various exhibitions and festivals.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://www.nsec.ac.in/page.php?id=519

**4.1.3** - Number of classrooms and seminar halls with ICT- enabled facilities such as smart class, LMS, etc.

50	
File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	www.nsec.ac.in/page.php?id=517
Upload Number of classrooms and seminar halls with ICT enabled facilities (Data Template)	<u>View File</u>

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

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

# 349.28

File Description	Documents
Upload any additional information	No File Uploaded
Upload audited utilization statements	<u>View File</u>
Upload Details of budget allocation, excluding salary during the year (Data Template	<u>View File</u>

# 4.2 - Library as a Learning Resource

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

The college Central Library is well-ventilated and has open access to Books, Periodicals, Journals, Special Reports, Theses, Indian Standards, Magazines, Newspapers, Question papers of the affiliating university, etc. The area is Wi-Fi enabled having a large air-conditioned Reading room with a seating capacity of 100 users. The Central Library has a rich collection of books, print journals, IEEE, CD / DVDs, lecture videos from NPTEL and e-books, and e-journals which are accessible from anywhere on the campus. Every semester, new titles and new volumes are being added, new editions of the old books are being procured, and additional e-books, and e-

```
journals are being purchased as a part of continuous
enrichment.
Name of ILMS software: LSEase (rel.5.0)
Nature of automation: Fully automated
Version: College version (Cloud version 2023)
Year of automation: 2006
TCS iON Library Software
DDF Version: 14.04.00.02
Year of Automation: Sep., 2022
An e-resources centre has been set up in the library using
LIBSYS with unlimited user login. The circulation module
covers all operations of circulation, member records with an
option for printing. The main features of the module are
single-screen issues, return and renewal along with total
details of members with photos and statistical reports. The
database module helps in database creation and maintenance. A
box is kept in the library for suggestions and overall
improvement.
```

File Description	Documents	
Upload any additional information		<u>View File</u>
Paste link for Additional Information	https://w	ww.nsec.ac.in/page.php?id=328
4.2.2 - The institution has sub the following e-resources e-jo ShodhSindhu Shodhganga M books Databases Remote accor resources	ournals e- lembership e-	A. Any 4 or more of the above

File Description	Documents
Upload any additional information	<u>View File</u>
Details of subscriptions like e- journals,e-ShodhSindhu, Shodhganga Membership etc (Data Template)	<u>View File</u>

**4.2.3** - Expenditure for purchase of books/e-books and subscription to journals/ejournals during the year (INR in Lakhs)

**4.2.3.1** - Annual expenditure of purchase of books/e-books and subscription to journals/e- journals during the year (INR in Lakhs)

#### 4.67

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

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

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

320

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

# 4.3 - IT Infrastructure

4.3.1 - Institution frequently updates its IT facilities including Wi-Fi

The institute continuously keeps upgrading the internet bandwidth as the latest teaching-learning methods demand the usage of MOOCS/SPOKEN TUTORIAL/NPTEL/Coursera/Webinars etc. A separate server with 20 TB HDD is being maintained exclusively for NPTEL video streaming within the campus. The institute keeps upgrading the software packages; new software packages presently being used in the industry, are being purchased to prepare the students industry-ready. The institution continuously upgrades multimedia facilities like audio-visual equipment and a Webinar centre which facilitates the video conference for effective teaching-learning process. The departments of the institution are equipped with the latest technology projectors so that teachers can teach through audio-visual aids and show video lectures of eminent personalities. Teachers are gradually trained to use more and more ICT facilities and students present their seminars and periodic project progress reports through ICT facilities.

There are adequate budget provisions for the purchase, upgrading and maintenance of computers, servers, and other system-related equipment/items. All the computers of the institution are connected with LAN and the entire campus is Wi-Fi connected. The library system is controlled by Libsys Software. Students and faculty members can access the online library system from their nodes. Internal backbone network connectivity had been upgraded from STP to Fibre optics.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	https://nptel.ac.in/localchapter/statis tics/208

# 4.3.2 - Number of Computers

#### 1191

File Description	Documents
Upload any additional information	<u>View File</u>
List of Computers	<u>View File</u>
4.3.3 - Bandwidth of internet in the Institution	connection

File Description	Documents
Upload any additional Information	<u>View File</u>
Details of available bandwidth of internet connection in the Institution	<u>View File</u>

# 4.4 - Maintenance of Campus Infrastructure

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

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

# 73.41

File Description	Documents
Upload any additional information	No File Uploaded
Audited statements of accounts	<u>View File</u>
Details about assigned budget and expenditure on physical facilities and academic support facilities (Data Templates)	<u>View File</u>

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

The administrative officer supervises the regular maintenance and proper utilization of infrastructural facilities of the institute. The maintenance works are mainly carried out by trained in-house experts and some are outsourced to external agencies. Equipment and furniture are procured through the central purchase committee. Computers and software are upgraded as per the needs of the department and market relevance.

All laboratory equipment, computers, library books, and pedagogic tools like projectors, laptops, microphones, etc. located in the departments are to be taken care of by the HOD. Stock Registers are maintained as regards their procurement prices and other details like location. For expensive items, separate log books for utilization are maintained. In case of repair of these items, the HOD is empowered to contact the supplier or servicing centre and place an order after obtaining approval from the authority.

Sports items are replaced on the recommendation of the Faculty-in-charge (FIC) of Sports and games. The playground is maintained under the FIC supported by the Estate Maintenance. Student common rooms, general-purpose infrastructure and support systems are maintained by the Administrator. All central facilities are under the direct control of the Principal, who is responsible for supervising their utilization and functioning with the help of relevant committees.

File Description	Documents
Upload any additional information	<u>View File</u>
Paste link for additional information	www.nsec.ac.in/page.php?id=517

# STUDENT SUPPORT AND PROGRESSION

# 5.1 - Student Support

**5.1.1** - Number of students benefited by scholarships and free ships provided by the Government during the year

**5.1.1.1 - Number of students benefited by scholarships and free ships provided by the Government during the year** 

#### 757

File Description	Documents
Upload self attested letter with the list of students sanctioned scholarship	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships provided by the Government during the year (Data Template)	<u>View File</u>

# **5.1.2** - Number of students benefitted by scholarships, free ships etc. provided by the institution / non- government agencies during the year

# **5.1.2.1** - Total number of students benefited by scholarships, free ships, etc provided by the institution / non- government agencies during the year

2	6
5	O.
-	-

File Description	Documents
Upload any additional information	<u>View File</u>
Number of students benefited by scholarships and free ships institution / non- government agencies in last 5 years (Date Template)	<u>View File</u>
5.1.3 - Capacity building and enhancement initiatives taken institution include the followi skills Language and commun Life skills (Yoga, physical fitr and hygiene) ICT/computing	n by the ing: Soft ication skills ness, health

File Description	Documents
Link to Institutional website	https://www.nsec.ac.in/#
Any additional information	<u>View File</u>
Details of capability building and skills enhancement initiatives (Data Template)	<u>View File</u>

# **5.1.4** - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

# 344

# **5.1.4.1** - Number of students benefitted by guidance for competitive examinations and career counseling offered by the institution during the year

344

	Documents		
Any additional information		View	<u>File</u>
Number of students benefited by guidance for competitive examinations and career counseling during the year (Data Template)		<u>View</u>	<u>File</u>
5.1.5 - The Institution has a transcription for timely redress grievances including sexual h and ragging cases Implement guidelines of statutory/regula Organization wide awareness undertakings on policies with tolerance Mechanisms for sul online/offline students' grieva redressal of the grievances th appropriate committees	sal of student arassment ation of tory bodies and zero bmission of ances Timely	A. All of	the above
File Description	Documents		
Minutes of the meetings of student redressal committee, prevention of sexual harassment committee and Anti Ragging committee		<u>View</u>	<u>File</u>
Upload any additional information		<u>View</u>	<u>File</u>
Details of student grievances including sexual harassment and ragging cases		<u>View</u>	<u>File</u>
5.2 - Student Progression			
5.2.1 - Number of placement of outgoing students during the year			he year
	5.2.1.1 - Number of outgoing students placed during the year		
	students placed	auring the y	

File Description	Documents
Self-attested list of students placed	<u>View File</u>
Upload any additional information	<u>View File</u>
Details of student placement during the year (Data Template)	<u>View File</u>

# 5.2.2 - Number of students progressing to higher education during the year

# 5.2.2.1 - Number of outgoing student progression to higher education

25

File Description	Documents
Upload supporting data for student/alumni	<u>View File</u>
Any additional information	No File Uploaded
Details of student progression to higher education	<u>View File</u>

# 5.2.3 - Number of students qualifying in state/national/international level examinations during the year (eg: JAM/CLAT/GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/State government examinations)

5.2.3.1 - Number of students qualifying in state/ national/ international level examinations (eg: JAM/CLAT/NET/ SLET/ GATE/ GMAT/CAT/GRE/ TOEFL/ Civil Services/ State government examinations) during the year

12

File Description	Documents
Upload supporting data for the same	<u>View File</u>
Any additional information	No File Uploaded
Number of students qualifying in state/ national/ international level examinations during the year (Data Template)	<u>View File</u>

# **5.3 - Student Participation and Activities**

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

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

5

File Description	Documents
e-copies of award letters and certificates	<u>View File</u>
Any additional information	<u>View File</u>
Number of awards/medals for outstanding performance in sports/cultural activities at uni versity/state/national/internati onal level (During the year) (Data Template)	<u>View File</u>

5.3.2 - Institution facilitates students' representation and engagement in various administrative, co-curricular and extracurricular activities (student council/ students representation on various bodies as per established processes and norms )

The students of this college are an integral part of all college activities. Students provide the necessary input required by the management as they are directly connected and involved in various important processes. The institute extended support and was given responsibilities to organize different activities and events. To inculcate the qualities of leadership and organization, active student bodies are in place along with a strong representation of students in the academic and administrative bodies/committees.

Different student bodies are involved in organizing cocurricular and extra-curricular activities under the guidance of faculty representatives. Such a platform offers a plethora of opportunities to students to give them a voice of their own and shed their inhibitions through enriching and engaging experiences. Club activities, workshops and intra-domain competitions enhance communication, team management, time management, resource management, and leadership skills and above all build confidence in each student.

Various student councils:

1.	Technical Club-Phoenix	
2.	Eco Cultural Club	
3.	Literacy Club	
4.	Lensified Club	
5.	Sports Club	
6.	IEE Students Chapter	
7.	Google Developers Club	
8.	GNX Society	
9.	Code Chef Campus Chapter	
10.	NSS unit	
11.	NSEC-Rotaract Club.	
Stude	nts' representation in Institution bodies/committees:	
1.	Internal Quality Assurance Cell	
2.	2. Library Committee	
3.	3. Placement & Training Committee	
4.	. Career Development Council	
5.	IIC & EDC	
б.	Internal Complaint Committee	
7.	Anti-Ragging Committee	

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=341
Upload any additional information	<u>View File</u>

**5.3.3** - Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions)

# **5.3.3.1** - Number of sports and cultural events/competitions in which students of the Institution participated during the year

17

File Description	Documents
Report of the event	<u>View File</u>
Upload any additional information	<u>View File</u>
Number of sports and cultural events/competitions in which students of the Institution participated during the year (organized by the institution/other institutions (Data Template)	<u>View File</u>

#### 5.4 - Alumni Engagement

5.4.1 - There is a registered Alumni Association that contributes significantly to the development of the institution through financial and/or other support services

Alumni are one of the prime stakeholders of the institution. The alumni association started its journey in the year 2008 with the name Netaji Subhash Engineering College Alumni Association (NSECAA). This NSECAA is exclusively for charitable, literacy and educational purposes. The institution is extremely proud of its alumni. Most of them are successful in their careers in profession, higher education and in the field of entrepreneurship. Institute successfully draws supports through Alumni meets on 23rd January each year in College Foundation Day and seeks suggestions for the development of the institution. They share their experiences and knowledge with the ace students and motivate them to achieve their goals. All departments also arrange reunion/alumni meets under the umbrella of NSECAA.

Alumni Contributions:

- 1. Sharing accomplishments and success stories to current students.
- 2. Delivering special lecture and motivating enrolled students.
- 3. Providing suggestion to modernize the existing facilities and upgrade at per industry requirements.
- 4. Facilitating the industrial training and field visit.
- 5. Advocating placement, industry visit and internship.
- 6. Assisting financial support, helping in pre-placement training and placement.

- 7. Facilitating in collaboration and MOUs with academia and industry.
- 8. Establishing and fostering community relationship amongst NSEC alumni
- 9. Providing feedback for academic reform.
- 10. Contributing professional development as members of IQAC.

Paste link for additional       http://www.alumni.nsec.ac.in         Upload any additional       View File		
Unload any additional View File	<u>n/</u>	
information	<u>View File</u>	
5.4.2 - Alumni contribution during the year (INR in Lakhs) D. 1 Lakhs – 3Lakhs		

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

#### GOVERNANCE, LEADERSHIP AND MANAGEMENT

# 6.1 - Institutional Vision and Leadership

6.1.1 - The governance of the institution is reflective of and in tune with the vision and mission of the institution

Board of Governors (BOG) is the supreme authority in respect of all matters concerning the institution - academic, administrative or financial. BOG acknowledges the faculty as the backbone of the institute. Hence instead of a micro level control, it encourages faculty to make decisions and implement them for building a strong academic base in the institute. BOG plays the role of a leader in framing a policy, renders all necessary help to the faculty for implementation of the policy keeping its role restricted mostly to that of a facilitator.

Policy laid down by the BOG through the vision of the institute speaks of accomplishment of excellence in engineering and technological education, research and entrepreneurship to render services to the society. The perspective plans to achieve the targets i.e. vision of the institute, are elaborated through the four stages of Mission in sequential order. The plans have been so made that the target is achievable by the faculty with minimal guidance of the BOG, the Management.In the prevailing bottom-top approach of institutional governance, institute is faculty-centric and faculties are empowered to take all decisions regarding academic issues and their implementation within the frame work of the institute's vision and mission.

File Description	Documents
Paste link for additional information	www.nsec.ac.in/page.php?id=98
Upload any additional information	<u>View File</u>

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

The institute follows a Bottom-Top approach, pursuance of which results in a decentralized and participative management. It is believed that any problem or issue should be handled at the level of origin by those who are directly involved. Matters only brought to the notice of the hierarchy when it cannot be solved or resources are needed. Quite naturally it starts from pedagogic management of departmental programmes, and related physical and academic resources. However, the guidelines are framed by the department collectively under the guidance of HODs/Deans/Principal. Board of Governors (BOG) has empowered different committees under the guidance of Principal/Director to manage all issues related to academics, their implementation, and administrative problems involving students.

In Institute Committees, majority of the members are faculties. The committee decisions are final and in case of dispute, the BOG is the final authority. For BOG Committee, one professor and one assistant professor are nominated. BOG is the apex body to take final decisions on academic, administrative and financial issues related to the institute. As per the decentralization policy, all academic matters are considered under the purview of Academic Committee (AC) and all academic related policies and quality initiatives by Internal Quality Assurance Cell (IQAC).

File Description	Documents
Paste link for additional information	<u>https://nsec.ac.in/images/all-</u> <u>committees-2023.pdf</u>
Upload any additional information	<u>View File</u>

# 6.2 - Strategy Development and Deployment

6.2.1 - The institutional Strategic/ perspective plan is effectively deployed

"Pursuit of excellence in Education" has been identified as the first and foremost distinctive feature in the vision of the institute. Several strategic plans were conceived and actualized to achieve the goal. One such operational example:

Industry Collaboration and MOU with Different Organizations

The institution immensely felt the need for beyond-curriculum training for industry readiness where the involvement of experts from industry/institute is indispensable. During this period, colleges signed MOUs with different top-notch organizations and some departments signed MOUs with universities for academic collaborative research.

- 1. MOU with NASSCOM: Impart training on the latest technologies and already, a couple of workshops were organized by NASSCOM.
- 2. MOU with Great Learning: Impart training on the latest technologies and extend support for the placement process.
- 3. MOU with GTT Foundation: Impart training on GD, interview skill enhancement and Mock PI. Already Mock Interview sessions organized for the final year.
- 4. MOU with TCS: TCS induced B.Tech Programme in Computer Science & Business Systems (CSBS). TCS has designed the syllabus in alignment with to needs of the IT industry. Organize FDP to train faculty.
- 5. MOU between the Department of ECE and A. K. Choudhury School of Information Technology, University of Calcutta: Training and research activities in the domain of IoT and Cyber-Physical system.

File Description	Documents
Strategic Plan and deployment documents on the website	<u>View File</u>
Paste link for additional information	https://nsec.ac.in/page.php?id=709
Upload any additional information	<u>View File</u>

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

Board of Governors (BOG):

BOG is the highest authority with nominated representatives from the Society. BOG is responsible for the governance of the institute, framing directive principles and policies, service rules, amending and approving policies, appointment in tiers, and approving the budget.

The Administrative Positions as set up by the BOG for administering the academic and administrative activities of the institution:

- 1. The Director is empowered by the Society to supervise the college in close coordination with the Governing Body and Head of the Institution.
- 2. The Principal being the head of the Institution is the charge of administration and all academic programmes and activities. The Dean and Heads of the Departments support the principal in the smooth functioning of academic activities.
- 3. The Dean supervises the research and development activities and is in charge of the academic affairs of the college.
- 4. The Administrative Officer looks after the administrative activities supported by the administrative officer.
- 5. Student Welfare Officer coordinates co-curricular and extra-curricular activities and is responsible for the well-being of the students.
- 6. The Chef Coordinator supervises and monitors the Entrepreneurship and Innovation activities.

Various statutory bodies where faculty representation is

maximum; viz. Internal Quality Assurance Cell, Academic Committee, Finance Committee, Anti-ragging Committee, Internal Complaint Committee, Grievance and Redressal Committee for smooth conduction of academic and administrative activities.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/page.php?id=677
Link to Organogram of the institution webpage	https://nsec.ac.in/page.php?id=99
Upload any additional information	<u>View File</u>

A. All of the above

File Description	Documents
ERP (Enterprise Resource Planning)Document	<u>View File</u>
Screen shots of user inter faces	<u>View File</u>
Any additional information	<u>View File</u>
Details of implementation of e-governance in areas of operation, Administration etc(Data Template)	<u>View File</u>

# **6.3 - Faculty Empowerment Strategies**

6.3.1 - The institution has effective welfare measures for teaching and non- teaching staff

The following welfare schemes for teaching and non-teaching staff are in vogue in the institute.

- 1. Welfare Cooperative name Netaji Subhash Engineering College Employees Cooperative Credit Society Ltd. has been formed to create funds for lending money to its members.
- 2. Medical facilities:

- Free treatment on working days at the Medical Unit of the institute
- Free ambulance facility for employees and family from home.
- 1. Children's education:
- All employees enjoy a concession in children's education if their wards study in the TIG-managed Techno Model School.
- 1. Study leave:
- Special facility to the regular faculties "leave on without pay basis" for updating their knowledge and experience and for upgrading qualifications.
- 1. Other employee benefits:
- Provident funds to all eligible employees covered under the EPF scheme as per applicable rules
- All eligible employees covered by ESI as per the ESI Act.
- 1. Employees' Group Insurance Scheme:
- Employees whose salary account in Axis Bank Ltd is covered under TATA AIG group medicare.
- 1. Policy for support to career development:
  - Concession to teaching loads and special leaves granted as and when needed for carrying out higher studies, research, pursuing Ph.D. or professional development like training or visits to industries, etc.
  - Technical staff members are encouraged to enhance of their qualifications.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/impdoc/631 %20Ef fective%20welfare.pdf
Upload any additional information	<u>View File</u>

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

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

# 1

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

**6.3.3** - Number of professional development /administrative training programs organized by the institution for teaching and non-teaching staff during the year

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

# 9

File Description	Documents
Reports of the Human Resource Development Centres (UGCASC or other relevant centres).	No File Uploaded
Reports of Academic Staff College or similar centers	No File Uploaded
Upload any additional information	<u>View File</u>
Details of professional development / administrative training Programmes organized by the University for teaching and non teaching staff (Data Template)	<u>View File</u>

**6.3.4** - Number of teachers undergoing online/face-to-face Faculty development Programmes (FDP) during the year (Professional Development Programmes,

# **Orientation / Induction Programmes, Refresher Course, Short Term Course etc.)**

# **6.3.4.1** - Total number of teachers attending professional development Programmes viz., Orientation / Induction Programme, Refresher Course, Short Term Course during the year

#### 47

File Description	Documents
IQAC report summary	<u>View File</u>
Reports of the Human Resource Development Centres (UGCASC or other relevant centers)	No File Uploaded
Upload any additional information	<u>View File</u>
Details of teachers attending professional development programmes during the year (Data Template)	<u>View File</u>

6.3.5 - Institutions Performance Appraisal System for teaching and non- teaching staff

Performance Appraisal for all teaching and non-teaching staff is mandatory for confirmation of service and promotion. It depends on the Annual Performance Review (APR) by the Director/Principal and Head of the Departments followed by a personal appraisal held by the Appraisal Committee. A wellformulated mechanism is in place to review periodically the progress and quality of teaching and non-teaching staff.

A Self-Appraisal Form (SAF) is to be filled in by an employee desirous of being appraised for promotion. The regular employees are eligible for promotion and contractual employees are not. However, the latter categories are eligible for increments post-successful performance before the appraisal committee. An SAF will carry the following details to be filled in by the employees concerned. Its validity is normally for a year. The contents are:

- Employee details
- Qualifications
- Description of job carried out in detail
- Achievements
- For faculty: academic, professional membership,

research and guidance, publications, technological developments and contributions.

• For non-teaching staff: job-related proficiency, commendable services rendered and contributions.

An employee awarded with a poor/unsatisfactory rating in any of the last three APRs will not be eligible for promotion unless he/she has acquired two excellent ratings, one of which has to be in the last APR.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/impdoc/635.pdf
Upload any additional information	<u>View File</u>

#### 6.4 - Financial Management and Resource Mobilization

6.4.1 - Institution conducts internal and external financial audits regularly Enumerate the various internal and external financial audits carried out during the year with the mechanism for settling audit objections within a maximum of 200 words

The institute has a transparent mechanism for internal and external audits as per the government rules. The institute conducts internal and external audits annually.

1. Internal Audit:

The audit team consists of:

- Qualified auditor from Corporate (Society's) Office nominated by the BOG
- Institute Accountant
- Office Assistant attached to institute account's section

The Institute account section provides all necessary records of income-expenditure vouchers, approval documents, approved budgets, etc. to the team. This includes revenue generated from all sources for the college. The internal auditor does a thorough check and verification of supporting documents including fee receipts and payment vouchers of the transaction carried out in each financial year. The auditor also ensures that all payments are duly authorized. A statutory audit report is prepared and submitted to the college management for review.

#### 1. External Audit:

External audit is carried out every year by the corporate office. On submission of the internally audited accounts to the corporate office, the accounts are arranged to be audited by a chartered accountant appointed by the board of trustees. Institute's accounts are examined as those of a group's (Society's) subsidiary. The institute accountant is also asked to be present.

File Description	Documents
Paste link for additional information	https://nsec.ac.in/page.php?id=681
Upload any additional information	<u>View File</u>

6.4.2 - Funds / Grants received from non-government bodies, individuals, philanthropers during the year (not covered in Criterion III)

6.4.2.1 - Total Grants received from non-government bodies, individuals, Philanthropers during the year (INR in Lakhs)

#### 2.19

File Description	Documents
Annual statements of accounts	No File Uploaded
Any additional information	<u>View File</u>
Details of Funds / Grants received from of the non- government bodies, individuals, Philanthropers during the year (Data Template)	<u>View File</u>

6.4.3 - Institutional strategies for mobilization of funds and the optimal utilization of resources

For a self-financing educational institute, the major revenue is raised from students' tuition fees i.e. semester fees. IQAC has categorized specific activities for the mobilization of funds and resources on top of the regular fund flow activities i.e. teaching-learning process.

Strategies for mobilization of funds:

- 1. Tuition fees collected from students for carrying out Teaching-Learning processes
- Add-on fees for inculcation of Professional Skills, Soft Skills, Value Added Training Programs, Industrial Training, etc.
- 3. Grants for Research and Development activities, consultancy, organizing seminars and conferences, and faculty development programs from Government and Nongovernment bodies/industries.
- 4. Endowments for Scholarships and Awards for academic excellence
- 5. Donations from alumni/employers/stakeholders/wellwishers for specific activities
- Revenue collected from Library Fines, deduction from Caution money for replacement of equipment/infrastructure, etc.
- 7. Rental fees collected from recruiting agencies like IT companies, Banking Services, DRDO, or for academic exercises like WBJEE, IITJEE, IIT GATE, etc.
- 8. Rental from commercial organizations like Banks and food courts located in the institution's premises mutual benefit scheme.

Optimal Utilization of Resources:

- 1. Sharing of the infrastructure working within the guidelines of the Regulatory Bodies.
- Sharing of laboratories, classrooms, pedagogic tools, etc. by different departments.
- 3. Sharing of spare resources for second shift programs.
- 4. Utilization of resources by external professional bodies especially during holidays.

Paste link for additional information     https://nsec.ac.in/page.php?id=681       Upload any additional information     View File	File Description	Documents
		https://nsec.ac.in/page.php?id=681
	Upload any additional information	<u>View File</u>

# 6.5 - Internal Quality Assurance System

6.5.1 - Internal Quality Assurance Cell (IQAC) has contributed significantly for institutionalizing the quality assurance strategies and processes

IQAC takes the onus of assuring and maintaining of quality of the academic and administrative activities of the college. Quite a few best practices have been institutionalized as a result of IQAC initiatives. Based on the present perspective and made-in-India initiatives, two recently institutionalized practices are:

#### 1. NSEC-Incubation Center [Based on the Activities]:

The NSEC Incubation Center helps students' innovation in product development through the following supports: Mentoring (Both technical and business), Product Development, IPR creation, Market fitting, Start-up Registration& Incubation support. Team Energy Saver received 2.0 Lakh Incubation support from the AICTE. The Incubation Center is approved by the MSME, Govt. of India for which students and external innovators are also applying for funding through the NSEC Incubation Center.

1. NSEC-IEEE Student Branch and Student Branch Chapters:

NSEC has 14 student branch chapters under different societies and organized nine events in 2022 and fifteen events in 2023. Various outreach activities were conducted with industries and academic institutions. A USD 1500 grant was received by MTT SBC from the MTT society. Additionally, students received awards, travel grants, registration fees for conferences, free accommodation and travel for workshops, and best paper awards with cash.

File Description	Documents
Paste link for additional information	https://www.nsec.ac.in/page.php?id=574
Upload any additional information	<u>View File</u>

6.5.2 - The institution reviews its teaching learning process, structures & methodologies of operations and learning outcomes at periodic intervals through IQAC set up as per norms and recorded the incremental improvement in various activities

IQAC reviews the quality of teaching-learning by analyzing the feedback collected from the stakeholders at periodic intervals and learning outcomes from the attainment of COs, POs and PSOs. Based on the information received, incremental improvements were made in two broad areas as follows:

1. Effective use of ICT in teaching-learning

- 1. The majority of the classrooms and laboratories are fully equipped with ICT facilities: LAN and Wi-Fi enabled.
- 2. Audio-visual facilities have been created and Google Workspace using college domain ID is used.
- 3. Virtual Lab facilities, simulation software environment and live demonstration of experiments.

2. Enriching Induction Program

The program is critically designed and consists of an Orientation Programme followed by:

- 1. Industry Outreach Talks by eminent persons from various industries
- 2. Alumni sessions & master classes by stalwarts
- 3. Motivational sessions & Art of Living
- 4. General Proficiency Test Diagnostic Assessment
- 5. Boot Camp on Soft skills, cyber security and ethical hacking
- 6. Bridge course on Physics and Mathematics
- 7. Entrepreneurship development program by Wadhwani Foundation

Also, the students are made aware of the University affairs, Massive Open Online Courses (MOOCs) and Mandatory Additional Requirements (MARs) for awarding B. Tech with Honours degree from MAKAUT.

File Description	Documents	
Paste link for additional information	https://w	ww.nsec.ac.in/page.php?id=574
Upload any additional information		No File Uploaded
6.5.3 - Quality assurance initiatives of the institution include: Regular meeting of Internal Quality Assurance Cell (IQAC); Feedback collected, analyzed and used for improvements Collaborative quality initiatives with other institution(s) Participation in NIRF any other quality audit recognized by state, national or international agencies (ISO Certification, NBA)		A. All of the above

File Description	Documents
Paste web link of Annual reports of Institution	https://www.nsec.ac.in/page.php?id=574
Upload e-copies of the accreditations and certifications	<u>View File</u>
Upload any additional information	<u>View File</u>
Upload details of Quality assurance initiatives of the institution (Data Template)	<u>View File</u>

# INSTITUTIONAL VALUES AND BEST PRACTICES

# 7.1 - Institutional Values and Social Responsibilities

7.1.1 - Measures initiated by the Institution for the promotion of gender equity during the year

The institution religiously looks into the matter of providing academic and non-academic help to students irrespective of their socio-cultural and sexual identities and orientation. The selection process and admission are purely based on merit irrespective of gender. The institution integrates special programs for gender sensitization through an orientation cum induction program for newly admitted students. A lady psychologist offers counseling and guidance to the students, the faculty advisors and their mentors. The social issues of relationship, caste and gender discrimination are delicately discoursed through English and Language Laboratory courses in the curriculum.

The women's grievance cell of the institute looks after the issues pertaining to women in particular. The institution in collaboration with Gender Benders, a social group led by people of various layers of academic practices, organizes numerous workshops, seminars and conventions. It is worth noticing that the female faculty strength counts to a bare minimum of less than 40%; it has dexterously channeled its female power by ensuring their involvement in almost all the functioning committees. Every year, a mass awareness program on gender equity is organized on International Women's Day. Separate common rooms catering to the needs of both boys and girls are sufficiently furnished and well-maintained.

File Description	Documents
Annual gender sensitization action plan	Gender Sensitization Programme: In the context of the modern scenario, a collaborative effort was undertaken with an independent organization named Gender Benders to create a mass awareness regarding the fundamentals of gender sensitization and sex gender discrimination during orientation and induction program. Young students were appraised on the areas of mutual confusion giving rise to concerns that would have required future attention in their course of career attainment. Women's Day Celebration: On International Women's Day, the eco- cultural club organizes a mass awareness campaign, a cultural programme followed by a paper presentation session. Every year the college puts in an effort to invite a guest speaker belonging to the core field.
Specific facilities provided for women in terms of:a. Safety and security b. Counseling c. Common Rooms d. Day care center for young children e. Any other relevant information	The institution religiously looks into the matter of providing academic and non-academic help to students irrespective of their socio-cultural and sexual identities and orientation. In the following section we will try to discuss the initiatives taken up and maintained by the institution with reference to the quoted categories (educational equity, socio-cultural equity and so on): Safety and Security: To fight and annul the discrimination on the grounds of moral, physical, psychological and gender inequality the institution has successfully managed to introduced and run and anti-sexual harassment and anti-ragging committee led and guided by core academic members, besides organizing numerous

workshops, seminars and conventions. We believe this is worth noticing that though the institution runs with the female faculty strength counting to a bare minimal of less than 40%; it has dexterously channelized its female power by ensuring their involvement in almost all the functioning committees. Counselling: Taking into account the core perspective of gender sensitization we must assert the fact that the institution experiences its fundamental glitch in the male-female student ratio (roughly a 2:1, respectively) that has been specifically documented in a precounselling session organized by APAI. Hence, the necessity of organizing an induction program during the initial hours of course work becomes inescapable. During these initial contact hours faculty members from the Department of BES (English) talk about the definition, necessity and problematization of Gender Sensitization issues (life skill) within a socio-cultural and socioacademic environment. A lady psychologist offers counselling and quidance to the students, the faculty advisors and their mentors. Common Room The institution harvests a couple of common rooms for both boys and girls alike. These rooms are well equipped with indoor games like chess, carom, and table tennis and so on. Finally, we believe that a gender neutral society is an outcome of a gender neutral attitude towards life that can only be attained by a gender neutral living. Hence, the institute promotes these values in every single aspect of its practices.

7.1.2 - The Institution has facilities for alternate sources of energy and energy

C. Any 2 of the above

conservation measures Solar energy Biogas plant Wheeling to the Grid Sensor-based energy conservation Use of LED bulbs/ power efficient equipment				
File Description	Documents			
Geo tagged Photographs	<u>View File</u>			
Any other relevant information		<u>View File</u>		

7.1.3 - Describe the facilities in the Institution for the management of the following types of degradable and non-degradable waste (within 200 words) Solid waste management Liquid waste management Biomedical waste management E-waste management Waste recycling system Hazardous chemicals and radioactive waste management

The routine operations conducted in the college have very little impact on the environment. The college is keenly vigilant to generate waste as low as possible. Especially design hoardings are used to minimize the usage of natural resources; water, electricity, etc. However, regarding waste management following measures are taken:

1. Solid Waste Management:

Solid wastes generated from different sources are segregated through colour-specific waste bins. Disposal carried out through local civic authorities.

- Green Waste-bins for biodegradable wastes
- Blue Waste-bins for non-biodegradable wastes
- Red Waste-bins for specific laboratories
- 1. Liquid Waste Management:

Sewage and effluents from the canteen are discharged through a normal sanitary system. Laboratory waste particularly in Chemistry and environmental laboratories is disposed of with special care and proper precautions.

1. E-Waste Management:

This includes motherboards, memory chips, compact discs, cartridges, batteries, etc. generated by electronic equipment such as Computers, Phones, Printers, UPS, Fax and Photocopy machines. The E-wastes thus generated are recycled as far as possible and usages of spare parts from old machines are diligently practiced. However, E-waste generated from hardware and condemned materials that cannot be reused or recycled are stored in a separate safe zone and disposed of centrally through scrap dealers and authorized vendors.Hazardous Chemical, Biomedical and Radioactive waste are nil.

File Description	Documents			
Relevant documents like agreements / MoUs with Government and other approved agencies		<u>View File</u>		
Geo tagged photographs of the facilities	No File Uploaded			
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		B. Any 3 of the above		

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

# 7.1.5 - Green campus initiatives include

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

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

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

7.1.6.1 - The institutional environment and energy initiatives are confirmed through the following 1.Green audit 2. Energy audit 3.Environment audit 4.Clean and green campus	c.	Any	2	of	the	above
recognitions/awards 5. Beyond the campus environmental promotional activities						

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

7.1.7 - The Institution has disabledfriendly, barrier free environment Built environment with ramps/lifts for easy access to classrooms. Disabled-friendly washrooms Signage including tactile path, lights, display boards and signposts Assistive technology and facilities for persons with disabilities (Divyangjan) accessible website, screen-reading software, mechanized equipment 5. Provision for enquiry and information : Human assistance, reader, scribe, soft B. Any 3 of the above

copies of reading material, se reading	creen
File Description	Documents
Geo tagged photographs / videos of the facilities	<u>View File</u>
Policy documents and information brochures on the support to be provided	No File Uploaded
Details of the Software procured for providing the assistance	No File Uploaded
Any other relevant	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 socioeconomic and other diversities (within 200 words).

information

The institution provides an inclusive environment with no discrimination among different religions, castes, languages, genders, cultures, or economic status. It offers equal opportunity to everyone right from the very first day i.e., the admission is strictly based on merit. Starting from the First-year induction program, these values are emphasized and frequently organized awareness programs. In addition, suitable posters and displays are spread all over the campus regarding gender equity, brotherhood and behavioral improvement. The institute celebrates cultural and regional festivals to teach tolerance and harmony to the students.

All-round development of students is encouraged through mentoring, guidance and participating in Rotaract community services, Hackathons, Tech Fest, etc. A sizeable number of students are from other states. The students' sports club, photography club and the literacy club organized different activities to promote harmony towards each other. International Women's Day, Yoga Day, etc. celebrations also promote tolerance and harmony. Anti-ragging Cells are instituted to take care of ragging issues. A two-tier disciplinary Committee - at the Departmental level and the institute level takes care of gross indiscipline among the students. The anti-sexual Harassment Cell chaired by a female faculty looks into all sexual indiscrimination cases in the College.

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

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

The first step towards sensitization of students and employees of the institution to the constitutional obligations is the formulation of rules and regulations approved by the Board of Governors, strict observance of the rules, and constitution of a Grievance Redressal Cell in case of any violation. The rules and regulations are so framed that they apply to all irrespective of gender, creed and culture. Right to Information Cell takes care of the maintenance of transparency.

The employees are mature enough to know their rights, duties and responsibilities as citizens. It is the students who are still young needing awareness programs. The awareness starts from the conduction of the Induction program. They are told about their values, rights, duties and responsibilities as citizens of India. Further input comes from the classroom teaching and the curriculum includes a compulsory course on the Constitution of India or the Essence of Indian Knowledge Tradition. The institute celebrates Independence Day, Republic Day, Netaji Jayanti, Gandhi Jayanti and Constitution Day to mark the importance of freedom and the glory of Indian freedom fighters. The institute also arranges Blood Donation Camp to save lives, celebrates Women's Day to mark the achievements of women and World Environment Day to aware of pollution issues.

	and its relevance to Business Date:			
	<u>26th April, 2023 Venue: Online</u>			
	Celebration of National Technology Day			
	Event Name: Two Day Boot Camp on			
	Finance and Go To Market Strategy Date:			
	11th & 12th May, 2023 Venue: H204 and			
	Incubation Center Celebrating World			
	Environment Day Event Name: "RELEAF" A			
	Tree Plantation Drive on the occasion			
	of World Environment Day Date:			
	05.6.2023 Venue: College Campus Faculty			
	Coordinator: Prof. Indranil Ghosh			
	Celebrating YOGA Day Event Name:			
	Celebrating YOGA Day Through the			
	Workshop on YOGA Date: 21.6.2023 Venue:			
	APC Hall Faculty Coordinator: Prof.			
	<u>Sukumar Roy</u>			
Any other relevant				
information	Celebrating 76th Independence Day Event			
	Name: Celebration of Independence Day			
	Date: 15.8.2023 Venue: College Campus			
	Faculty Coordinator: Prof. Indranil			
	Ghosh Event Description: The Eco			
	<u>Cultural Club of Netaji Subhash</u>			
	Engineering College in association with			
	the Institution's Innovation Council			
	(IIC) organized a celebration event			
	including Flag Hoisting, Lecture on			
	76th Independence Day and other			
	<u>cultural events at the campus ground on</u>			
	15th August, 2023, on the occasion of			
	76th Independence Day where Director,			
	Principal, dean, HODs and other faculty			
	members are present. No. of Student			
	_			
	Involved: 70 No. of Faculty Involved:			
	42			
7.1.10 - The Institution has a	prescribed B. Any 3 of the above			
code of conduct for students,				
administrators and other sta				
conducts periodic programm				
regard. The Code of Conduc				
on the website There is a con				
monitor adherence to the Co				
Conduct Institution organize	s protessional			

ethics programmes for stude teachers, administrators and 4. Annual awareness program Code of Conduct are organiz	other staff nmes on
File Description	Documents
Code of ethics policy document	<u>View File</u>
Details of the monitoring committee composition and minutes of the committee meeting, number of programmes organized, reports on the various programs etc., in support of the claims	<u>View File</u>
Any other relevant information	<u>View File</u>

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

Various festivals are celebrated on the college campus such as Holi, Bengali New Year, Rabindra-Jayanti, Monsoon-onset (Borshamongol), Dussera (Bijoya Dasami) etc. The greatest of all the celebrations take place on the birth anniversary of Netaji Subhash Chandra Bose, which happens to be the Foundation Day of the college. A cultural program is organized preceded by the hoisting of the flag and march-past by the security personnel of the college, keeping in mind the patriotic essence of the day. Moreover, the college takes this auspicious opportunity to give away prizes of excellence to students and faculty members, and other staff.

Students organize and participate in competitions, cultural events and college fests through various institutional clubs, the biggest of all being 'Avenir', the tech-fest organized by tech club Phoenix. This gala event is a three-day extravaganza, showcasing the creative talents of the students on a wider platform.

International Women's Day is celebrated to highlight the achievements of women. The students enthusiastically design and display posters on the theme. The day also marks a call to action for accelerating gender parity. The college also celebrates Teachers Day, Environment Day, Earth Day, World

# Water Day, National Science Day, Innovation Day, Engineers' Day, etc. every year.

File Description	Documents
Annual report of the celebrations and commemorative events for the last (During the year)	<u>View File</u>
Geo tagged photographs of some of the events	No File Uploaded
Any other relevant information	<u>View File</u>

#### 7.2 - Best Practices

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

Best Practices:1

1. Title of the Practice

NSEC-Incubation Center [Based on the Activities]

2. Objectives of the Practice

NSEC-Incubation Center has been established to support startup creation from the students' innovation.

3. The Context

The establishment of the Institution's Innovation Council (IIC) at every HEIs by the MoE's Innovation Cell helps to foster the innovation culture at the campus leading to the development of innovative projects by the students.

```
4. The Practice
```

The NSEC Incubation Center helps students' innovation in product development through the following supports:

- Mentoring (Both technical and business)

- Product Development
- IPR creation

- Market fitting

- Start-up Registration
- Incubation support
- 5. Evidence of Success

Team Energy Saver received 2.0 Lakh Incubation support from the AICTE. The Incubation Center is approved by the MSME, Govt. of India for which students and external innovators are also applying for funding through the NSEC Incubation Center.

6. Problems Encountered and Resources Required

The primary problem is the funding for establishing a fabrication lab and purchasing of latest equipment. Another problem is to provide market-fitting product manufacturing facilities.

File Description	Documents
Best practices in the Institutional website	www.nsec.ac.in/page.php?id=612
Any other relevant information	Best Practices: 2 1. Title of the Practice NSEC-IEEE Student Branch and Student Branch Chapters 2. Objectives of the Practice Inspire and empower student members to showcase and enhance their technical skills and innovation for the benefit of humanity. 3. The Context Students can enhance their knowledge outside the classroom and learn from peers, experts and professionals and opportunity to be exposed to the latest technology. Additionally, improve their soft and hard skills. The contextual features are addressed through strategic planning, collaboration, and commitment to continuous improvement. 4. The Practice NSEC has 14 student branch chapters under different societies and arranged several workshops, seminars and technical sessions with the common

consideration: Professional development Industry collaboration Student project and competition Community engagement Leadership development Innovation and creativity Adaptation to technological changes Continuous learning Ethics and professionalism Diversity and inclusion Cultural relevance 5. Evidence of Success Student branch chapters organized nine events in 2022 and fifteen events in 2023. Various outreach activities were conducted with industries and academic institutions, JU, CU & IIEST Shibpur. A USD 1500 grant was received by MTT SBC from the MTT society. Additionally, students received awards, travel grants, registration fees for conferences, free accommodation and travel for workshops, and best paper awards with cash. Students have published research papers in peer-reviewed journals and conferences with the help of the student branch. 6. Problems Encountered and Resources Required Problems encountered include: - Limited financial resources - Challenges in securing active faculty engagement due to teaching & administrative responsibility - Student participation challenges due to academic pressure & extracurricular commitments -Overcoming technical hurdles i.e. technology accessibility 7. Notes (Optional) Ensure clear communication channels, foster collaboration between students and faculty, and establish industry partnerships. Adapt IEEE activities to align with local needs, encourage diverse participation, and prioritize continuous improvement.

# 7.3 - Institutional Distinctiveness

7.3.1 - Portray the performance of the Institution in one area distinctive to its priority and thrust within 200 words

Industry oriented skill based certification programmes and internship is one the most envisioned area of the institute. The institute signed MoUs with SunEco Tech Venture Pvt. Ltd, Google Asia Pacific Pte. Ltd. and National Institute of Electronics & Information Technology (NIELIT) for skill based certification programs and internship. Under this venture, 25 students trained with skill enhancement program through SunEco Tech Venture Pvt. Ltd., 550 students completed skill enhancement program conducted by Google Asia Pacific Pte. Ltd., and 185 students completed certification course on block chain technology from NIELIT. Fourteen faculty members certified as Training of Trainers [TOT] for Introduction to Blcokchain Technology from NIELIT.

A significant number of final year students grabbed internship and have started on job training programs in different industries as follows:

Dell Technologies:01

Hexaware: 08

Intel Corporation: 04

Johnson Control: 02

Keysight Technology: 01

Labvantage: 04

Lechler (India) Pvt. Ltd.: 01

Minsol Limited.: 01

NRIFT: 02

Polestar: 02

RDC Concrete: 01

RT Camp: 01

Rxefy Tech Pvt. Ltd.: 01

Agarpara Jute Mill Ltd.: 03

Calsoft: 01

Shri Mahavir FEPRO Alloys: 04

Tiger Analytics: 01

Titagarh Wagons: 04

Valuemomentum: 16

Vara Infrovate: 02

Aditya Birla: 04

Virtusa: 37

Xenonstack: 04

File Description	Documer	nts
Appropriate web i Institutional webs		<u>View File</u>
Any other relevan information		<u>View File</u>

7.3.2 - Plan of action for the next academic year

- Organize Technical Events with IEEE Student Branch Chapters, outreach programs, and collaborative activities.
- Special focus on VLSI, high-frequency engineering, and artificial intelligence, and machine learning.
- Initiatives for internship opportunities, placement, and career guidance.
- Emphasis on multidisciplinary research, research guidance, sponsored projects, journal publications, and patents.
- Industry-oriented real-time projects for students and to publish work in reputed journals/conferences.
- Organize industry-oriented value-added training cum hands-on training programs.
- Organize industry interaction, academic expert lectures, and alumni talks to expose students to the latest technology and industry practices.
- Organize orientation programs and design an effective Induction program.

- Arrange and participate in workshops, e-summit, Hult Prize, Hackathon under IIC & EDC.
- Achieve NBA accreditation of programs, 2nd Cycle NAAC accreditation, and participation in NIRF.
- Arrange FDP, seminars, conferences, workshops, invited talks, and webinars.
- Initiative for MOUs with universities, training institutions, and industries for certificate courses, internships, collaborative projects, papers, faculty/student exchange, etc.
- Revision of various policies, and promotional activities, ICT enable classrooms & modernized laboratory.
- Encouraged to pursue more number of SWAYAM courses, higher studies, and engineering services.