# Central Library Bulletin

## ACADEMIC YEAR 2021 – 2022

# NEC Central Library Bulletin

**- Academic Year 2021 - 2022**
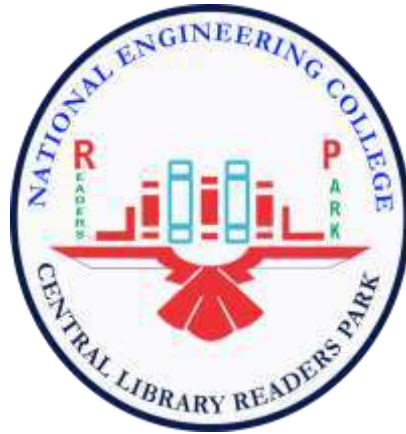
## CENTRAL LIBRARY READERS PARK

### VISION

Enriching the knowledge and attitude of the students through reading and analyzing quality books, articles and journals

### MISSION

- To motivate the students to gain knowledge via the art of reading
- To develop interest in reading via organizing various activities
- To create opportunities for students to inculcate the reading habits
- To transform the lives by reading inspiring books

# Central Library Bulletin

**Academic Year 2021 – 2022**



*Compiled by*

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# National Engineering College

*(An Autonomous Institution,Affiliated to Anna University, Chennai)*

K. R. Nagar, Kovilpatti – 628 503. Thothukudi District

**June 2022**

Central Library Bulletin for the Academic Year 2021 - 2022

# Contents

**K.R.Arunachalam,** B.Com., M.B.A. (Misso-USA)
Correspondent

I am happy to see the sixth issue of the Central Library Bulletin which publishes the students' activities and achievements.

NEC focuses on making Great Engineers to the society by imparting ethical values, quality education and good personality with intense knowledge in technical and technological entities. In that stand, Central Library constantly provides a vivid platform to the students to share and gain skills and knowledge in both moral and professional areas. Reading makes a man wise... and Central Library Readers Park continuously encourages reading as a regular habit among the students who are all engineers of tomorrow.

I heartily bless good wishes to all the members of Readers Park and Central Library for their intensive effort on the release of the 6th Central Library Bulletin.

*Correspondent*

## 1.  National Engineering College (NEC)

NEC, the most prominent landmark of Kovilpatti, has been the crowning glory of this Match less City of Matches. Its celebrated 'Son of the Soil' Kalvithanthai Thiru.K.Ramasamy has transformed the entire social and cultural scenario in and around this small town by wielding the magical wand of social commitment and munificence. Our foresighted philanthropist transformed a strip of barren land into a magnificent academic complex that has been consistently producing infallible engineers of high competence right from the day of its inception in 1984, duly sanctioned under the self-financing scheme under the Government of Tamil Nadu. During the past thirty-eight years, the college has grown and expanded in an outstanding way.

NEC offers a wide variety of high quality education and training opportunities for every student, and awards qualifications through the highly reputed Anna University. The college offers six undergraduate and five postgraduate programs in a wide range of disciplines. NEC is sprawled in a lush green campus, with an alluring backdrop of an enchanting hillock, in NH7 between Madurai and Tirunelveli. The Institute provides an excellent locale for academic pursuits in south Tamil Nadu.

## 2.  Central Library

Central Library acts as a knowledge hub for the academic activities of our institution, with a mission to provide a knowledge gateway to the user community with the state-of-the-art technologies. Web-based Library Integrated Automation has fully automated library system which facilitates e-Gate, Circulation, Web OPAC etc.

The Central Library provides excellent library facilities for all the students and faculty members, such as sufficient books, proper seating and reading facility, proper classification and arrangement of books, an attractive fully air-conditioned modern separate Library building with high-speed wi-fi connectivity etc.

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

The Central Library is kept open throughout the year except for government Holidays (Weekdays 08.30 a.m. to 07.30 p.m. and Sundays 09.30 a.m. to 01.00 p.m.)

Sufficient number of systems are available in the e-Library section with Internet access facility to access Non-book materials such as CDs, DVDs, textbook tutorial CDs and Periodical's CDs which are kept in the Library.

### 2.1  About Central Library

➢ *Book stocking section* has the collection of text and reference books as prescribed in the syllabus and relevant books for preparing GATE, IES etc.

➢ In the *Periodical Section*, peer reviewed National Journals and Technical Magazines are available and are kept in printed form.

➢ The *Circulation Section* is fully computerized bar-coded circulation service (Issue, Return and Renewal of library documents).

➤ *Reference Section* has Reference books, Dictionaries, Encyclopedias, Directories, Exam Guides, Standards, Manuals, Handbooks, Proceedings and collection of University & Autonomous question paper booklets.

➤ Back issue of journal are bounded every year and kept in *back volume section* for reference purpose. Back volumes can also be borrowed by the users.

➤ *Web OPAC* (Web Online Public Access Catalogue) facilitates online search related to availability of library resources viz. Books, Journals, CD/DVDs, Back volumes and project reports.

➤ An *A.V.Hall* (Audio & Video Section) for organizing NPTEL programme, Spoken Tutorial Workshops, Seminars, Conference & Viva Voce exams.

➤ *Reprography* and *printing facilities* are available to the users.

➤ *Book Bank Section* caters to the needs of students who avail the post-metric scholarship offered by the Government of India. The eligible students can avail six books at a time. The books are issued for a period of one semester and to be returned at the end of the semester.

## 2.2 Library Collections (as on 31 May 2022)

| Library Collections | | Titles | Volumes |
|---|---|---|---|
| Book | | 24831 | 62201 |
| Reference Books | | 1005 | 1078 |
| Book Bank Books | | 718 | 3319 |
| Student's Projects (Since 2004) | | | 5362 |
| Back Volumes (Since 1993) | | | 3476 |
| Book's & Periodical's CDs | | | 3317 |
| NPTEL Videos | | | 24 TB |
| Dailies | | | 22 |
| **Periodicals** | | | |
| National Journals | | | 66 |
| International Online Journals | | | 538 |
| Technical Magazines | | | 41 |
| **E-Resources** | | | |
| E – Journals | Science Direct (Elsevier) | | 376 |
| | IEEE (ASPP) | | 162 |
| E – Books | EBSCO Engineering Core Collections | | 6567 |
| **Institutional Membership** | | | |
| DELNET (Developing Library Network) | | | |
| NDLI Club (National Digital Library of India Club) | | | |
| N-List (National Library & Information Services Infrastructure for Scholarly Content) | | | |
| e-Shodh Sindhu Consortia | | | |

| Online Self-Learning Courses |
| --- |
| SWAYAM – NPTEL, IITM, Chennai |
| FOSS Courses, Spoken Tutorial, IIT Bombay |
| Coursera |
| **Question Bank (Since 2002 – Anna University & Since 2011 – Autonomous)** |

## 3.   E - Learning Management System (e-LMS)

'e-Learning encompasses research, learning and teaching in the digital environment', where students have access to courses offered online with instruction and course materials, instructors' notes, course topics and discussion forums etc.

e-LMS customizes the content for NPTEL Videos and our College contents such as e-journals, e-books and e-question banks etc.

- ✓ NPTEL videos can be accessed through a web interface from Library without connecting to internet and also with HTTP video streaming facility.
- ✓ It also provide federated search in Science Direct (Elsevier) and IEEE (ASPP) online journals, e-books, e-question banks etc. [*URL: https://nec.edu.in/e-learning/* ]
- ✓ In addition, e-LMS offers the facility for to access NPTEL GATE materials in ECE & CSE

### 3.1  E - Library

Sufficient number of systems are available in the e-Library with internet access facility to access the e-resources. Users can access for educational, research and development purposes. Non-book materials such as CDs, DVDs, text books and periodical's CDs are also kept in the Library.

### 3.2  E - Resources

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

### 3.2.1  Science Direct (Elsevier)

- ➢ Elsevier AICTE package covered 376 Engineering and Computer Science Online journals, articles + back files access from 2000 onwards through https://www.sciencedirect.com/browse/journals-and-books
- ➢ Online access to the content of Science Direct platform via our institution's IP addresses and remote access using User ID and Password.
- ➢ Science Direct (Elsevier) online journals subscribed from 2012 to till date.

**How to Remote Access Science Direct (Elsevier) Anywhere and Anytime?**

   Step - 1: Open the Science Direct *https://www.sciencedirect.com/*

   Step - 2: Scroll to the bottom of the page and click on Remote access

   Step - 3: Enter our College e-mail ID and click on Continue. A confirmation email will be sent.

   Step - 4: Open the email and click the link to activate your remote access

   Step - 5: Now you are ready to access Science Direct from any device from anywhere

   Step - 6: Just open www.sciencedirect.com and sign in with your e-mail address and password

### 3.2.2 IEEE (ASPP)

➢ IEEE Xplore digital library provides online access to the IEEE core collection of engineering, electronics, and computer science periodicals through https://ieeexplore.ieee.org

➢ Online access via our institution's IP addresses and remote access using User ID and Password.

➢ 162 online IEEE Society – Sponsored Journals, Magazines and Transactions.

➢ A back file from 2005 onwards. Fast, custom search interface with facets, save searches, e-mail alerts, RSS feeds and more.

➢ IEEE ASPP online journals subscribed from 2009 to till date.

**How to Remote Access IEEE Xplore Anywhere and Anytime?**

Step – 1: Please visit the IEEE Xplore Digital Library at https://ieeexplore.ieee.org

Step – 2: Click the institutional sign in and select sign in with username and password

Step – 3: Use the below Username and Password

Username: 0NYo0m0V          Password: 6NFLVg1u

### 3.2.3 EBSCO Engineering Core e-Books:

➢ The EBSCO Engineering core collections of e-Books are available at https://search.ebscohost.com/

➢ Online access via our institution's IP addresses and remote access using User ID and Password.

➢ More than 6,600 e-books covering topics such as energy sciences, industrial safety, material science, optics and photonics, project management, robotics and more.

➢ EBSCO Engineering Core Collection e-Books are subscribed from March 2022.

**How to Remote Access EBSCO e-Books Anywhere and Anytime?**

The Central Library subscribes to the EBSCO e-Books Engineering Core Collections and provide remote access credentials to all students & faculties.

| | | |
|---|---|---|
| Access URL | : | https://search.ebscohost.com/ |
| User ID | : | nec |
| Password | : | Library@2022 (Password is case sensitive) |

## 4. Institutional Memberships

### 4.1 Developing Library Network (DELNET)

➢ The Institutional member of DELNET, New Delhi. URL: http://www.delnet.in/

➢ DELNET is offering Inter Library Loan & Document Delivery Services to its member Libraries. Any type of library material, irrespective of format, which is needed by a member Library of DELNET for reference, information, recreation, study, research, and instruction, shall be borrowed from DELNET.

➢ The lending library will determine whether the material can be provided by keeping in view of regulations or restrictions.

➢ DELNET Institutional Membership is available from 2004 to till date.

## 4.2   National Digital Library of India (NDLI)

➢ National Digital Library of India (NDLI) is a virtual repository of learning resources. This is not just a repository with searching / browsing facilities, it also provides a host of services for the learner community.

➢ NDL India is designed to hold content of any language. It is being arranged to provide support for all academic levels including researchers, lifelong learners of all disciplines, and all popular form of access at https://ndl.iitkgp.ac.in/

➢ It is sponsored and mentored by Ministry of Education, Government of India, through NMEICT. It is developed, operated and maintained by the Indian Institute of Technology, Kharagpur.

### NDLI Club (National Digital Library of India CLUB)

➢ NDLI Club is a platform for conducting learning oriented events, both online and offline, for students of an institute using the contents of NDLI and experts' deliver talks or conduct sessions

## 4.3   E-Shodh Sindhu

➢ Consortia for Higher Education E-Resources is to provide access to qualitative electronic resources including full-text, bibliographic and factual databases to academic institutions at a lower rates of subscription at https://ess.inflibnet.ac.in/oes/memberhome.php.

➢ NEC has registered in e-Shodh Sindhu Consortia in 2018.

## 4.3 N-LIST

➢ The National Library and Information Services Infrastructure for Scholarly Content (N-LIST) through INFLIBNET Centre, Gandhi Nagar, Gujarat.

➢ N-LIST provides access to 6,150 e-Journals and 31,64,309 e-Books through the INFLIBNET's proxy server at http://nlist.inflibnet.ac.in

➢ Remote access using registered User ID and Password

## 5.   INFED Federated Single Sign-on Framework & Remote Access

➢ It facilitates federated search in Science Direct (Elsevier) Engineering and Computer Science Online Journals, IEEE (ASPP) Core Collection of Engineering, Electronics and Computer Science online journals, EBSCO Engineering Core Collections of e-Books through INFED @ INFLIBNET and our staff members & student data have been registered for remote access.

➢ The INDIAN Access Management Federation (INFED), INFLIBNET Centre, Gandhi Nagar, Gujarat has been providing seamless access to e-resources from anywhere, anytime to the Users. The users can access multiple e-resources within a federated single sign-on framework.

➢ The e-resources are available at https://idp.nec.edu.in

## 6.   Self-Learning & Extension Services:

Self-Learning can be challenging, even for the brightest and outstanding students. Students need various skills towards learning for successful independent / self-learning study.

## 6.1  Readers Park

Reading is a creative, mind-expanding, adventurous and exciting activity. Through reading, we can experience what it is like to be somebody else in a different age, culture, in a different society, another part of the world, another time in history. Readers embark on a journey every time they open a book.

All the students from our college who are determined to enhance their reading skills, which factually run with the latest current affairs and are interested in having interdisciplinary knowledge on various aspects are encouraged to enroll in Readers Park. The members of the Readers Park will meet once a week/month, online or offline with presentation / discussion based on the trends of different topics.

### Review Meetings

Readers Park executive committee members review meetings were held two times through Google meet and 7th Annual Executive Committee Members was held at Central Library during the Academic Year 2021 – 2022.

- ✓ The Executive Committee Members provided suggestions and recommendations for improving reading ability, policy taken, development of leadership quality among students and Readers Park activities.
- ✓ Tentative schedule was prepared for conducting upcoming events and various activities, both technical and non-technical.
- ✓ The office bearer's selection of the Readers Park was discussed during the meeting.

Members actively participated in this meeting and came up with different innovative and peculiar ideas, so as to improve the participation in Readers Park.

### NEC Central Library Readers Park Organized the following Events and Activities

### 6. 1.1  Webinar on Looking into Crypto Currency

The Central Library Readers Park, National Engineering College, Kovilpatti had organized a webinar on 'Looking into Crypto Currency' on 03rd June 2021 at 08.00 p.m. through Google meet.

M.Bhuvaneswari, III - CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. M.Mathan Babu, III - CSE, delivered an online lecture on Looking into Crypto Currency.

**M.Mathan Babu**

He explained that crypto currency is a form of payment that can circulate without the need for a central monetary authority such as a government or bank. Instead, crypto currencies are created using cryptographic techniques that enable people to buy, sell or trade them securely.

Crypto currencies can be exchanged for goods and services, though they often are used as investment vehicles. Crypto currency is also a key part of the operation of some decentralized financial networks, where digital tokens are an important tool for carrying out transactions. Further, he also explained how to invest in crypto currency, how many crypto currencies are there? What is their worth?

In the book locker section S.Suji, III – CSE narrated the book 'The Tale of the Three Brothers' by JK Rowling. The story is about three brothers who travel together, reach a treacherous river. They make a magical bridge over the river. Halfway across the bridge, they meet the personification of death who is angry for losing three potential victims. He pretends to be impressed by them and grants each a wish as a reward. The eldest brother asks for an unbeatable dueling wand, so death gives him the Elder Wand. The middle brother asks for the ability to resurrect the dead, so death gives him the resurrection stone. The youngest brother doesn't trust death and asks for a way to stop death from following him, so death reluctantly gives him his cloak of invisibility. Afterwards, the brothers go their separate ways. The eldest brother, bragging about his powerful wand, is robbed of it and murdered while he is asleep. The middle brother uses his ability to bring back the woman he loved, which died before he could marry her. However, she is not fully alive and full of sorrow. He kills himself to join her. As for the youngest brother, death never manages to find him, as he stays hidden under his cloak. Many years later, the brother removes his cloak and gives it to his son. Pleased with his achievements, he greets death as an old friend and chooses to leave with him as equals.

At the end of the session, participants interacted with their views and gave some feedback. T.N.Ragul, III - CSE, proposed the vote of thanks. C.A.Narain, III - CSE hosted the event. Nearly **twenty nine** participants actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.10 p.m.

### 6. 1.2   Webinar on Food a Fact of Life

The Central Library Readers Park, National Engineering College, Kovilpatti organized a webinar on 'Food a Fact of Life' on 10$^{th}$ June 2021 at 08.00 p.m. through goole meet. S.M.Jeya Ramani, IV - CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. G.Vasuki, III - EEE, delivered an online lecture on Food a Fact of Life.

**G.Vasuki**

Food is any substance consumed to provide nutritional support for an organism. Food is usually of plant, animal or fungal origin, and contains essential nutrients, such as carbohydrates, fats, proteins, vitamins, or minerals. The substance is ingested by an organism and assimilated by the organism's cells to provide energy, maintain life, or stimulate growth. Different species of animals have different feeding behaviours that satisfy the needs of their unique metabolisms, often evolved to fill a specific ecological niche within specific geographical contexts.

The food system has significant impacts on a wide range of other social and political issues including: sustainability, biological diversity, economics, population growth, water supply, and access to food. The right to food is a human right derived from the International Covenant on Economic, Social and Cultural Rights (ICESCR), recognizing the 'right to an adequate standard of living, including adequate food', as well as the 'fundamental right to be free from hunger'. Because of these fundamental rights, food security is often a priority international policy activity; for example Sustainable Development Goal 2 'Zero Hunger' is meant to eliminate hunger by 2030. Food safety and food security are monitored by international agencies like the International

Association for Food Protection, World Resources Institute, World Food Programme, Food and Agriculture Organization, and International Food Information Council, and national regulation by institutions, like the Food and Drug Administration in the United States.

In the book locker section C.A.Narain, III – CSE narrated the book 'Arthamulla Indhu Madham Part – 1' by Kavingar Kannadasan. At the end of the session, participants interacted with each other, by sharing their views and gave some feedback. S.Roshini, III - CSE, proposed the vote of thanks. A.Vijaya Priyanka, III - CSE hosted the event. Nearly **thirty two** participants actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.10 p.m.

### 6. 1.3    IEEE Xplore Digital Library Online Training Programme

Central Library Readers Park of National Engineering College, Kovilpatti had organized 'IEEE Xplore Digital Library Online Training Programme' on 15th June 2021 through WebEx online tool.

IEEE Xplore provides web access to more than 5 million full text pdf documents from publications in Computer Science, Electrical Engineering, Electronics and allied fields. It contains material published mainly by the Institute of Electrical and Electronics Engineers (IEEE) and other partner publishers.

**T.S.Nanda Lal**

Anyone can search IEEE Xplore to find bibliographic records, abstracts for its contents and for access to full-text pdf documents it requires an individual or institutional subscription.

In this regard, NEC Central Library has subscribed IEEE Xplore since 2005. Now, we had organized IEEE Xplore Digital Library Online Training Programme.  The main aim of this event is to provide hands-on online training and How to Remote Access IEEE Xplore for quicker navigation and discovery (features, coverage, search, retrieval, services etc) by the faculty members & students using IEEE Xplore.

E.Shyamala Bharathi, IV - CSE student welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), has delivered presidential address. L.Nishanthi, IV - ECE student introduced the Chief Guest.

Chief Guest T.S.Nanda Lal, Senior Training Manager - South India, EBSCO Information Services & IEEE Xplore Digital Library, New Delhi stated that the IEEE Xplore provides web and remote access to more than 5 million documents to IEEE core collection of engineering, electronics and computer Science periodicals. It contains nearly 190 online IEEE Society-sponsored journals, magazines, and transactions. Approximately 20,000+ new updates are added each month.

The following key points are discussed during the webinar:

- ✓ What's new @ IEEE
- ✓ Retrieving the right set of articles from over 5 million records
- ✓ Identify new research areas and tracking technology trends
- ✓ Learn to access supplemental items such as IEEE Media files, Algorithmic Codes & Datasets
- ✓ Exporting mathematical equations and downloading high resolution figures

- ✓ Knowledge sharing and collaboration with team members
- ✓ Receiving alerts on the new contents and journals of interest
- ✓ Research documentation and reference management
- ✓ Advanced search techniques for campus interviews and placements
- ✓ Knowing publishing tool via IEEE Author Center
- ✓ Exploring upcoming conference at ieee.org
- ✓ Session review and online quiz

About 62 faculty members and students participated in this event. S.I.Jenefa, IV - EIE delivered the vote of thanks. Dr.K.Karunai Raghavan, Librarian and active Central Library Readers Park members made the arrangements for this entire event and it is a grand success.

### 6.1.4 Webinar on இந்திய விஞ்ஞானத்தில் அப்துல் கலாமின் அக்கினிச்சிறகுகள்

The Central Library Readers Park, National Engineering College, Kovilpatti organized a special lecture on 'இந்திய விஞ்ஞானத்தில் அப்துல் கலாமின் அக்கினிச்சிறகுகள்' on 08th July 2021 at 08.00 p.m. through Google meet. S.M.Jeya Ramani, IV – CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. T.Anandhavel, III – Mechanial, introduced the speakers. **J.Thamba,** AP/S&H, National Engineering College delivered an online special lecture on இந்திய விஞ்ஞானத்தில் அப்துல் கலாமின் அக்கினிச்சிறகுகள்.

**J.Thamba**

Every common man who by his sheer grit and hard work achieves success should share his story with the rest for they may find inspiration and strength to go on, in his story. The 'Wings of Fire' is one such autobiography by visionary scientist Dr.APJ Abdul Kalam, who from very humble beginnings rose to be the President of India. The book is full of insights, personal moments and life experiences of Dr.Kalam. It gives us an understanding on his journey of success.

Dr.Kalam by narrating his life journey evokes the reader to identify with one's inner fire and potential, for he is of the firm belief that each one of us is born with the strength and potential to make a tangible change in the world. How he inspires himself to achieve dreams and how he goes about accomplishing so much is what the book captures nicely.

The book recollects many anecdotes and stories from childhood, his time at school and college. The time spent at the Langley Research Center, NASA and Wallops Flight Facility gets a lot of attention. Personal tragedies have not been left out. The time when he lost his father and how he felt when conferred with many awards like the Padma Bhushan have been written in much detail.

The second half of the book deals with Dr.Kalam, the scientist who made a significant contribution in developing the country's guided missile program, a pioneering effort for the security of the nation. It's not with reason that he was nicknamed as the 'Missile Man of India'. The book also contains 24 photographs from various stages of his life.

Authored by Dr.APJ Abdul Kalam and Mr.Arun Tiwari, the 180 page book 'The Wings of Fire' was first published in the year 2000. Mr.Tiwari is a well-known missile scientist who has worked

with Dr.Kalam. Having become a bestseller, the book has even been translated into thirteen languages, which includes Chinese and French.

About the Author: Dr.APJ Abdul Kalam from 2002 to 2007 served as the 11th President of India. Greatly admired all over India, he was a scientist by profession, who played a leading role in developing the country's missile program. From humble roots in Rameswaram, Tamil Nadu, Dr.Kalam in an inspirational autobiography 'The Wings of Fire' traces the rise and the mark he made in life.

At the end of the session, participants interacted with their views and gave some feedback. R.Anu, III - IT, proposed the vote of thanks. S.Suji, III - CSE hosted the event. Nearly fifty nine participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.20 p.m.

### 6.1.5   NDLI Club Inaugural Function cum User Awareness Programme on NDLI Resources

National Digital Library of India (NDLI) is an initiative by the Ministry of Education, Government of India, through its NMEICT and it is developed, operated and maintained by the IIT Kharagpur. NDLI Club is an enabler of career progression for students, job seekers, researchers and learners.



**Dr.Vignesh Sornamohan**

Central Library Readers Park, National Engineering College, Kovilpatti and National Digital Library of India (NDLI), Indian Institute of Technology Kharagpur (IITK) jointly organized 'NDLI Club Inaugural Function cum User Awareness Programme on NDLI Resources' on 12th July 2021 by 02.30 p.m. through Cisco Webex.

C.Brindha, III - IT welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic) and NEC NDLI Club President delivered presidential address. P.J.Keerthana, III - IT introduced of the chief guest.

**Dr.Vignesh Sornamohan**, Chief Strategic and Outreach Officer, National Digital Library of India (NDLI), Indian Institute of Technology (IIT) Kharagpur, West Bengal acted as Chief Guest, inaugurated the NDLI Club and explained about NDLI Resources for our faculty members and students.

He briefed about the usage of NDLI Portal, NDLI Resources and NDLI Club activities. The Chief Guest also stated that the National Digital Library of India (NDLI) is a virtual repository of learning resources, that is not just a repository with search / browse facilities, but provides a host of services for the learner community.

The main objective is to collect and collate metadata and provide full text index from several national and international digital libraries, as well as other relevant sources. It is a digital repository containing textbooks, articles, videos, audio books, lectures, simulations, fiction and all other kinds of learning media.

The NDLI provides free of cost access to many books in the Indian languages and English.  He also instructed that the institutions has to set up the NDLI Club as a nodal body, and these Club conduct events to facilitate students to develop knowledge, skill and traits beyond regular

curriculum which are essential for their progression in respective professional domain. The events may be either physical or virtual and are conducted through the NDLI Club portal.

The events are organized at respective institute level or city / district / state / regional level or all-India level. Nearly 185 students and faculty members have registered for this event through NDLI Portal.

About 47 faculty members and students were participated in this event. R.Anu, II - IT proposed the vote of thanks. Dr.K.Karunai Raghavan, Librarian & NDLI Club Secretary and active Club members made the arrangements for this entire event successfully.

### 6.1.6  Webinar on Electric Vehicles : A Future Projection

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Electric Vehicles: A Future Projection' on 21$^{st}$ July 2021 at 08.00 p.m. through Google meet. M.Bhuvaneswari, III – CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address.

Dr.S.Iyahraja, Associate Professor, Department of Mechanical Engineering, National Engineering College delivered an online lecture on Electric Vehicles: A Future Projection. He explained that the Electric Vehicle (EV) is a vehicle that uses one or more electric motors for propulsion.

**Dr.S.Iyahraja**

An electric vehicle may be powered through a collector system by electricity from off-vehicle sources, or may be self-contained with a battery, solar panels, fuel cells or an electric generator to convert fuel to electricity.

EVs include, but are not limited to, road and rail vehicles, surface and underwater vessels, electric aircraft and electric spacecraft. EVs first came into existence in the mid-19th century, when electricity was among the preferred methods for motor vehicle propulsion, providing a level of comfort and ease of operation that could not be achieved by the gasoline cars of the time.

Internal combustion engines were the dominant propulsion method for cars and trucks for about 100 years, but electric power remained commonplace in other vehicle types, such as trains and smaller vehicles of all types.

In the 21st century, EVs have seen resurgence due to technological developments, and an increased focus on renewable energy and the potential reduction of transportation's impact on climate change and other environmental issues. Project Drawdown describes electric vehicles as one of the 100 best contemporary solutions for addressing climate change.

At the end of the session, participants interacted with their views and gave some feedback. G.Udhaysriram, III - Mechanical, proposed the vote of thanks. K.M.Alhaseena, III - CSE hosted the event. Nearly forty one participants actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.00 p.m.

### 6.1.7   Webinar on New Generation in Nano Technology

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'New Generation in Nano Technology' on 29th July 2021 at 08.00 p.m. through Google meet. P.Vidhya, III – ECE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address.

**I.Vivek Anand**

I.Vivek Anand, AP/ECE, National Engineering College delivered an online lecture on New Generation in Nano Technology. Predicting the future of any major technology is difficult. On the one hand, there often is a tendency to underestimate the impact of a technology and the pace of its development. Nanotechnology development already is outpacing the predictions made when the NNI (National Nanotechnology Initiative) was created in 2000. At that time, the focus was on the impact of Nano in 20–30 years (ROCO 2007). Now, the analysis firm Lux Research predicts that by 2015 Nano will be incorporated in $3.1 Trillion of manufactured goods worldwide (Lux Research 2008) and will account for 11 percent of manufacturing jobs globally (Lux Research 2006).

Alternatively, the promise of technology and the pace of its development may be exaggerated. There are many examples of technological advances that were predicted to be imminent but that had not materialized decades, or even centuries, later. A further complication is that technology can develop in completely unanticipated directions and be applied in ways that no one envisaged.

This section begins by reviewing several analyses of nanotechnology's future and of current nanotechnology research. It then reviews applications of the research that are likely to occur in the next 10–20 years. It concludes by distilling the attributes that are likely to characterize future technologies in general and the next generation of nanotechnology specifically.

At the end of the session, participants interacted with their views and gave some feedback. T.N.Ragul, III - CSE, proposed the vote of thanks. C.A.Narain, III - CSE hosted the event. Nearly thirty eight participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 08.40 p.m.

### 6.1.8   Webinar on Explosives in Manufacturing Technology: An Overview

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Explosives in Manufacturing Technology: An Overview' on 05th August 2021 at 08.00 p.m. through Google meet. R.Bagawathi, III – EEE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. T.Anandhavel, III – Mech., introduced the speakers. Dr.I.Sankar, Assistant Professor, Department of Mechanical Engineering, National Engineering College delivered an online lecture on Explosives in Manufacturing Technology.

**Dr.I.Sankar**

The session is about the effective use of explosives to deform the sheet metal into the required form. Explosive charges, when they explode, they will release more energy in the form of heat, pressure (shockwave), and sound. The force developed in the shockwave is further systematically directed to impose on the metal sheets to deform the same into the required shape. The session

covered the details of the constructional features, working principle, merits & demerits and applications of the explosive forming process used in metal components manufacturing sectors.

At the end of the session, participants interacted with their views and gave some feedback. V.Sharmie, III - EEE, proposed the vote of thanks. T.Anandhavel, III – Mech. hosted the event. Nearly twenty six participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 08.55 p.m.

### 6.1.9   Webinar on Universal Human Values

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Universal Human Values' on 12th August 2021 at 08.00 p.m. through online in connection with National Librarian's Day Celebration.

R.Yamini Rajam, III – EEE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), Department of ECE, National Engineering College delivered an online lecture on Universal Human Values.

**Dr.S.Tamil Selvi**

She explained that the Universal human values are one of the most frequently encountered phrases today; we are constantly coming across it on the pages of newspapers and magazines. Its frequency creates the illusion that its content is intuitively clear, attractive, and shared by everyone. However, the various versions of what is understood by universal human values-the good, truth, beauty, freedom, or civil society, a non-nuclear world, ecological protection, pluralism, etc.-show that this is by no means the case. However, there are some universal ethical principles that apply across all professions, including:

- ✓ Honesty
- ✓ Trustworthiness
- ✓ Loyalty
- ✓ Respect for others
- ✓ Adherence to the law
- ✓ Doing good and avoiding harm to others
- ✓ Accountability

She also said that the tilt of students towards good behavior or aggression and misbehavior. They clarify how education in human values is deeply essential to nourish the moral capabilities in the students and ultimately in society in a positive way. At the end of the session, participants interacted with their views and gave some feedback. S.M.Jeya Ramani, IV - CSE, proposed the vote of thanks. S.Anu Mala, III - ECE hosted the event. Nearly forty two participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.10 p.m.

### 6.1.10   Webinar on Git + GitHub for Beginners

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Git + GitHub for Beginners' on 19th August 2021 at 08.00 p.m. through google meet.

V.Dharini, III - Civil, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. Dr.M.Bhuvaneswari, AP (SG) / CSE, delivered an online lecture on Git + GitHub for Beginners.

**Dr.M.Bhuvaneswari**

**Git** is a version control tool (software) to track the changes in the source code. GitHub is a web-based cloud service to host your source code (Git repositories). It is a centralized system. Git doesn't require GitHub but GitHub requires Git. She explained about Git and GitHub, Installing Linux & Windows. Further, she told that the Configure git to access / work with Github. The following steps are also explained about opening up a pull request (PR) for Git and GitHub:

- Install
- git and create a GitHub account
- Create a local git repository
- Add a new file to the repo
- Add a file to the staging environment
- Create a commit
- Create a new branch
- Create a new repository on GitHub
- Push a branch to GitHub
- Create a pull request (PR)
- Merge a PR
- Get changes on GitHub back to your computer
- Bask in your git glory

At the end of the session, participants interacted with their views and gave some feedback. N.Abinaya, III - Civil, proposed the vote of thanks. K.Vignesh Shankar, III – CSE hosted the event. Nearly forty one participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.25 p.m.

### 6.1.11  Webinar on History of Coins in India

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'History of Coins in India' on 26th August 2021 at 08.00 p.m. through google meet.

M.Tirugnanam, III - CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. K.Sree Deepak, AMET University, Chennai delivered an online lecture on History of Coins in India. He explained that India is one of the earliest issuers of coins in the world and it is known for its sheer diversity in terms



**K.Sree Deepak**

of minting techniques, motifs, sizes, shapes, metals used, etc. The Coin of India has played a very important role in the history of economic development of the country ever since its inception. The motifs, symbols, stamps used on the Indian coins since ancient times depict a lot about the rulers and their reign. Many archaeologists and explorers have done a deep analysis of these ancient Indian coins. This study of coins is known as Numismatics.

The following points are also explained:

- ➢ Evolution of Coin System in India

- ➢ Indian coins belonging to different eras
- ➢ Ancient Indian Coin
- ➢ Ancient Dynasty Coins
- ➢ Medieval Indian Coin
- ➢ Pre-Colonial, Princely States and British India Coin
- ➢ Post Independence Coins of India

At the end of the session, participants interacted with their views and gave feedback. A.Muthu Lakshmi, III - IT, proposed the vote of thanks. I.Madhumathi, III - IT hosted the event. Nearly thirty nine participants had actively participated in the event. Readers Park members activly coordinated the entire event in a successful manner. The webinar came to an end by 09.25 p.m.

### 6.1.12   Webinar on Artificial Intelligence for Industry 4.0

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Artificial Intelligence for Industry 4.0' on 02nd September 2021 at 08.00 p.m. through google meet. S.Ajay Ragendran, III - CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. Dr.L.Jerart Julus, AP (SG) / IT delivered an online lecture on Artificial Intelligence for Industry 4.0.

**Dr.L.Jerart Julus**

- ➢ Industry 4.0 is the digital transformation of manufacturing / production and related industries and value creation processes.
- ➢ Industry 4.0 is used interchangeably with the fourth industrial revolution and represents a new stage in the organization and control of the industrial value chain
- ➢ Artificial intelligence is the simulation of human intelligence processes by machines, especially computer systems.
- ➢ Specific applications of AI include expert systems, natural language processing, speech recognition and machine vision.
- ➢ Industrial AI is a systematic discipline, which focuses on developing, validating and deploying various machine learning algorithms for industrial applications with sustainable performance.
- ➢ It acts as a systematic methodology and discipline to provide solutions for industrial applications and function as a bridge connecting academic research outcomes in AI to industry practitioners.

At the end of the session, participants interacted with their views and gave some feedback. T.N.Ragul, III - CSE, proposed the vote of thanks. C.A.Narain, III – CSE hosted the event.

Nearly forty nine participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.15 p.m.

### 6.1.13   Webinar on An Overview of Backend Servers and it's Vulnerabilities

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'An Overview of Backend Servers and It's Vulnerabilities' on 09th September 2021 at 08.00 p.m. through google meet.

G.Vasuki, III - EEE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. J.Kailaash Jeevan, II - IT, delivered an online lecture on An Overview of Backend Servers and it's Vulnerabilities. In his lecture, he reiterated the vulnerabilities and issues that servers are prone to. He also emphasises how to handle issues associated with applications on the backend server in a better way.



**J.Kailaash Jeevan**

At the end of the session, participants interacted with their views and gave some feedback. M.Ramkumar, III - CSE, proposed the vote of thanks. M.Vinothini, III – EEE hosted the event. Nearly fifty one participants actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.30 p.m.

**6.1.14     Debate on சமூக ஊடகங்களின் வளர்ச்சி இன்றைய தலைமுறைக்கு நன்மை அளிக்கிறதா? தீமை அளிக்கிறதா?**

The Central Library Readers Park, National Engineering College, Kovilpatti and Yoga Club had jointly conducted a Tamil Debate on 'சமூக ஊடகங்களின் வளர்ச்சி இன்றைய தலைமுறைக்கு நன்மை அளிக்கிறதா? தீமை அளிக்கிறதா?' on 16th September 2021 at 08.00 p.m. through google meet. T.Anandhavel, III - Mech., welcomed the online gathering. S.Anu Mala, III - IT introduced the speakers. Dr.S.Tamil Selvi, Professor and Dean (Academic) had served as a judge for this event.

- V.Tamilkumar, III - ECE,
- P.Vidya, III - ECE,
- S.Vijaya Krishnan, III - ECE made their points for the team நன்மை அளிக்கிறதா?
- D.Arjun, III - ECE,
- M.Kaviguru, III - ECE,
- S.K.Ganapathy, II - ECE made their points for the team தீமை அளிக்கிறதா?

Finally Dr.S.Tamil Selvi, Professor and Dean (Academic) expressed her judgement எந்த ஒரு அறிவியல் தொழில்நுட்பமாக இருந்தாலும் சாதக மற்றும் பாதக விளைவுகள் உண்டு. அதில் குறிப்பாக சமூக ஊடகங்களின் வளர்ச்சி இன்றைய தலைமுறைக்கு தகவல் பறிமாற்றம், நிகழ்ப்படம் பதிவேற்றம், கருத்துக்கள் பறிமாற்றம், குழு உரையாடல், வேலைவாய்ப்பு தகவல்கள் பெற, பொழுதுபோக்கு, உலக சமூகங்கள் அல்லது சர்வதேச நபர்களின் நட்புறவு என பல உள்ளது என்றும், மேலும் நமது சிறந்த படைப்புகள் அனைத்தையும் சமுதாயத்திற்கு கொண்டு சேர்க்க சமூக ஊடகங்களின் வளர்ச்சி பெரும் நன்மை அளிக்கிறது என்றும்.

தனிநபர் தகவல் திருட்டு, சட்டவிரோத பதிவேற்றங்கள், தவறான பதிவுகள், அடிமையாதல், குணாதிசய மாற்றம், கலாச்சார கலப்பு, தணிக்கை தொடர்பான பதிவுகள் என பல தீமைகளும் உள்ளது என்றும், எனவே மாணவர்கள் அனைவரும் சமூக ஊடகங்களை நல்வழியில் உபயோகப்படுத்தி வாழ்க்கையில் முன்னேறவேண்டும் என்று கேட்டுக்கொண்டார்.

T.N.Ragul, III - CSE delivered the vote of thanks. Nearly forty two participants had actively participated in the online event. Active Readers Park members coordinated the event in a successful manner. The event came to an end at 09.15 p.m.

## 6.1.15 Webinar on Literature for Engineers

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Literature for Engineers' on 23rd September 2021 at 08.00 p.m. through google meet.

S.V.Anshio, III - CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. K.Nanda Kumar, AP / S&H, delivered an online lecture on Literature for Engineers. He emphasized the following importance of literature in a lucid manner:

**K.Nanda Kumar**

Various elements of literature are discussed in a wide range as follows. Literature reflects human nature and the way we can learn and relate to others. By reading through a first-person perspective, we can fully immerse ourselves into a different mindset and figure out how others think and feel. This is important as we're becoming increasingly detached from human interaction. Literature is something that will never change in the way it makes you feel, regardless of whether that's on paper or as an eBook.

History plays a fundamental role in shaping literature, novel, play, or poem you read has been influenced by political context or a time period in which it was written.

The importance of reading is emphasized as follows:

Reading a book is one of the best ways to fully immerse your mind into another person's dialogue and experiences. Being able to empathize and understand other people's feelings is a key aspect of helping you connect to different regions, races, societies, and periods of time.

At the end of the session, participants interacted with their views and gave some feedback. C.N.Narain, III - CSE, proposed the vote of thanks. S.Infant Anto Edin, IV – CSE hosted the event. Nearly twenty eight participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.20 p.m.

## 6.1.16 Webinar on 5G Cooperative Wireless Network

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on '5G Cooperative Wireless Network' on 30th September 2021 at 08.00 p.m. through Google meet.

A.Thejaswini, II - CSE, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. B.Ganapathy Ram, AP / ECE, delivered an online lecture on 5G Cooperative Wireless Network.

**B.Ganapathy Ram**

The speaker has started with the fundamentals of wireless communication systems such as modes of transmission & reception, multiple access techniques, the evolution of generations, geographical coverage, and design specification of 5G. He highlighted techniques used in 5G wireless systems such as Massive MIMO, small cell deployments and heterogeneous network deployments. He briefed the negative impacts of wideband data transmission through wireless channels and explained a method called "Non-orthogonal Multiple Access (NOMA) Full-Duplex

(FD) Cooperative Communication" to overcome the impacts. He also portrayed performance analysis of NOMA-FD cooperative communication in terms of outage behaviour and capacity with other existing techniques.

At the end of the session, participants interacted with their views and gave some feedback. T.Ananthavel, III - Mech, proposed the vote of thanks. S.Varshini, II – CSE hosted the event. Nearly forty seven participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 09.10 p.m.

### 6.1.17   Webinar on Put Your Best Foot Forward

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Put Your Best Foot Forward' on 10th January 2022 at 07.30 p.m. through google meet.

G.Vasuki, III - EEE, welcomed the online gathering. R.Anu, III - IT, introduced the speaker. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. E.Shyamala Bharathi, (2017-2021 CSE Batch) Site Reliability Engineer - Associate Grade, Hexaware Technologies, delivered an online lecture on Put Your Best Foot Forward.

**E.Shyamala Bharathi**

She explained that significant skills and talents needed for main streams of career (employment, higher education and entrepreneurship). She also highlighted the demand of jobs in modern technologies and a motivated the students to handle the work / personal life style efficiently.

At the end of the session, participants interacted with their views and gave some feedback. T.Anandhavel, III - Mech., proposed the vote of thanks. C.A.Narain,  III – CSE hosted the event. Nearly thirty seven participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 08.35 p.m.

### 6.1.18   IEEE Xplore Digital Library Online Training Programme

NEC Central Library has been subscribing IEEE Xplore since 2005. Central Library Readers Park of National Engineering College, Kovilpatti in association with EBSCO Information Services & IEEE Xplore Digital Library had organized 'IEEE Xplore Digital Library online Training Programme' on 17th January 2022 through Zoom meet.

The main aim of this event is to provide hands-on online training and How to Remote Access IEEE Xplore for quicker navigation and discovery (features, coverage, search, retrieval, services etc) to the faculty members, research

**T.S.Nanda Lal**

scholars & students on the usage of the IEEE Xplore. S.M.Jeya Ramani, IV - CSE student welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), has delivered presidential address. C.A.Narain, III - CSE student introduced the Chief Guest.

Chief Guest T.S.Nanda Lal, Senior Training Manager, EBSCO Information Services & IEEE Xplore Digital Library, New Delhi stated that the IEEE Xplore provides web and remote access to

more than 5 million documents to IEEE core collection of engineering, electronics and computer Science periodicals. It contains nearly 192 online IEEE Society-sponsored journals, magazines, and transactions. Approximately 20,000+ new update articles are added each month.

The following key points were discussed during the webinar:

- ✓ What's new @ IEEE, About the IEEE & Core areas of activity
- ✓ About IEEE Xplore Digital Library, IEL & ASPP
- ✓ Retrieving the right set of articles from over 5 million records
- ✓ Identify new research areas and tracking technology trends
- ✓ Learn to access supplemental items such as IEEE Media files, Algorithmic Codes & Datasets
- ✓ Exporting mathematical equations and downloading high resolution figures
- ✓ Knowledge sharing and collaboration with team members
- ✓ Receiving alerts on the new contents and journals of interest
- ✓ Research documentation and reference management
- ✓ Advanced search techniques for campus interviews and placements
- ✓ Knowing publishing tool via IEEE Author Center
- ✓ Exploring upcoming conference at ieee.org
- ✓ Session review and online quiz

Nearly 92 faculty members and students participated in this event. S.Subhashree, IV - IT delivered the vote of thanks. Dr.K.Karunai Raghavan, Librarian and active Readers Park members made the arrangements for this entire event and it is a grand success.

## 6.1.19  Webinar on Critical Thinking for Student Innovators

The Central Library Readers Park, National Engineering College, Kovilpatti and NDLI Club had jointly organized a webinar on 'Critical Thinking for Student Innovators' on 24th January 2022 at 07.30 p.m. through Google meet.

T.Anandhavel, III - Mech., welcomed the online gathering. Dr.V.Jackins, AP(SG)/IT, delivered an online lecture on Critical Thinking for Student Innovators.

**Dr.V.Jakins**

He talked about critical thinking process and addressed the difference between convergent thinking and critical thinking. He explained the difference level of process involved in critical thinking. Importance of empathy mapping process very clearly.

At the end of the session, participants interacted with their views and gave some feedback. V.Sharmie, III - EEE, proposed the vote of thanks. T.Anandhavel, III - Mech., hosted the event. Nearly forty participants had actively participated in the event. Active Readers Park members coordinated the entire event in a successful manner. The webinar came to an end at 08.35 p.m.

### 6.1.20    Webinar on எட்டுத்திக்கும் தமிழ் வளர்ப்போம்

International Mother Language Day recognized that languages and multilingualism can advance inclusion, and the sustainable development goals focus on leaving no one behind. UNESCO believes education, based on the first language or mother tongue, must begin from the early years as early childhood care and education is the foundation of learning.

The theme of the 2022 International Mother Language Day, 'Using Technology for Multilingual Learning: Challenges and Opportunities', raises the potential role of technology to advance multilingual education and support the development of quality teaching and learning for all.

**Nellai Dr.S.Muthu**

In this regard, the Central Library Readers Park, NDLI Club and NSS had jointly celebrated International Mother Language Day on 22nd February 2022 at 07.00 p.m. through Cisco Webex.

Dr.K.Karunai Raghavan, Librarian, welcomed the online gathering. Dr.S.Tamil Selvi, Professor & Dean (Academic), ECE delivered the presidential address. C.A.Naren, III CSE spoke on World Mother Language Day. S.Kumara Murugan, Senior Lecturer / Mech., Lakshmi Ammal Polytechnic College introduced the chief guest. Kavimaamani Nellai Dr.S.Muthu, Former Scientist, Satish Dhawan Space Centre (SDSC), Sriharikota acted as Chief Guest and delivered an online lecture on எட்டுத்திக்கும் தமிழ் வளர்ப்போம்.

At the end of the session, participants interacted with their views and gave some feedback. J.Thamba, AP/S&H and Coordinator, NSS**,** proposed the vote of thanks. S.M.Jeya Ramani, IV - CSE and T.Pavithra, III - ECE, hosted the event. Nearly ninety nine participants had actively participated in the event. Reader's Park members and NSS volunteers made the arrangements for this entire event in a grand success. The event came to an end at 08.40 p.m.

### 6.1.21    EBSCO Engineering Core e-Book Online Awareness Training Programme

Central Library Readers Park of National Engineering College, Kovilpatti in association with EBSCO Information Services had organized 'EBSCO Engineering Core e-Book Online Awareness Training Programme' on 29h March 2022 through Zoom meet. EBSCO Engineering Core Collection of e-Books is subscribed from March 2022. More than 6,600 e-books covering topics such as energy sciences, industrial safety, material science, optics and photonics, project management, robotics and more are available. G.Keerthikasri, II - CSE student welcomed the online gathering. Dr.S.Tamil

**T.S.Nanda Lal**

Selvi, Professor  & Dean (Academic), delivered the presidential address. S.Suji, III - CSE student introduced the Chief Guest. Chief Guest T.S.Nanda Lal, Senior Training Manager, EBSCO Information Services, New Delhi stated that the EBSCO eBooks are a focused collection that helps professionals in broadening their Engineering knowledge of the engineering in industry to support decision-making, facilitate product design and implement industry best practices.

The following key points are discussed during the webinar:

- ✓ Why Subscribe to EBSCO eBooks?
- ✓ What are the top trade publishers and leading professional societies and organizations included?

- ✓ How the EBSCO Mobile app provides library users with an easy way to access their library's EBSCO host and EBSCO Discovery service resources?
- ✓ Receiving alerts on the new contents
- ✓ Research documentation and reference management
- ✓ Advanced search techniques and Session review and online quiz

Nearly 145 faculty members and students participated in this event. S.Suji, III - CSE delivered the vote of thanks. T.N.Raghul, III - CSE hosted the event. Dr.K.Karunai Raghavan, Librarian and active Readers Park members made the arrangements for this entire event in a grand success.

## 6.2 Readers Park – Office Bearers 2021-22

| | | | | |
|---|---|---|---|---|
| Advisors | : | Dr.S.Shanmugavel, Director | | |
| | | Dr.K.Kalidasa Murugavel, Principal | | |
| Convener | : | Dr.S.Tamil Selvi, Dean (Academic) & Prof. / ECE | | |
| Coordinators | : | Dr.K.Karunai Raghavan, Librarian | | |
| Members (Staff) | : | Mr.S.Cammillus, AP (SG) / ECE | | |
| | | Dr.V.Jackins, AP (SG) / IT | | |
| | | Mr.T.Rajan, Assistant Librarian | | |
| President | : | Ms.S.Subashree | - | IV - IT |
| Vice Presidents | : | Mr.C.A.Narain, | - | III - CSE |
| | | Mr.T.Anandhavel | - | IV- Mech. |
| | | Ms.G.Vasuki | - | III - EEE |
| | | Ms.R.Anu | - | III - IT |
| | | Ms.N.Abinaya | - | III - Civil |
| | | Ms.S.Anu Mala | - | III - ECE |
| Secretary | : | Ms.S.M.Jeya Ramani | - | IV - CSE |
| Joint Secretaries | : | Ms.C.Brindha | - | IV – IT |
| | | Ms.S.Suji | - | III – CSE |
| | | Ms.A.S.N.Jaanu | - | III – EEE |
| | | Ms.P.Siva Sankari | - | III – IT |
| | | Ms.M.Kaviguru | - | III – ECE |
| | | Mr.G.Udhaysriram | - | III – Mech. |
| Coordinators - Student | : | Mr.T.N.Ragul | - | III – CSE |
| | | Mr.K.Vaidyanathan | - | III – CSE |
| | | Mr.M.Ramkumar | - | III – CSE |
| | | Ms.R.Ananthi | - | III – IT |
| | | Mr.K.Vignesh Shankar | - | III – CSE |
| | | Ms.S.Roshini | - | III – CSE |
| | | Ms.V.Sharmie | - | III - EEE |

| Executive Members | : | Mr.S.Ajay Rajendran | - | III – CSE |
|---|---|---|---|---|
| | | Ms.P.Akshaya | - | III – EEE |
| | | Ms.K.M.Alhaseena | - | III – CSE |
| | | Ms.S.V.Anshio | - | III – CSE |
| | | Mr.S.Aruneswaran | - | III – Mech. |
| | | Ms.R.Bagawathi | - | III – EEE |
| | | Ms.M.Bhuvaneswari | - | III – CSE |
| | | Mr.P.Deepak Kumar | - | III – Mech. |
| | | Mr.G.Dhanarajan | - | III – CSE |
| | | Ms.V.Dharini | - | III – Civil |
| | | Mr.S.K.Ganapathy | - | II – ECE |
| | | Ms.M.Harini | - | II – IT |
| | | Mr.S.Infant Anto Edin | - | IV – CSE |
| | | Mr.J.Joyson | - | III – CSE |
| | | Ms.S.Karishma | - | II – IT |
| | | Mr.M.Karthick | - | III – ECE |
| | | Mr.K.Karthicksaran | - | III – CSE |
| | | Ms.M.Karthika | - | III – ECE |
| | | Mr.I.Karthikeyan | - | III – CSE |
| | | Ms.G.Kaviya | - | III – ECE |
| | | Mr.J.Kishore | - | II – EEE |
| | | Mr.Leyo Jaffrin Clington | - | II – CSE |
| | | Ms.I.Madhumathi | - | III – IT |
| | | Mr.S.S.Maharaja Kumar | - | II – IT |
| | | Ms.K.S.Maheswari | - | II – CSE |
| | | Mr.K.Manoj | - | III – ECE |
| | | Mr.R.Mari Raja | - | III – Mech. |
| | | Mr.R.Mathan Prasanth | - | III – Mech. |
| | | Mr.A.Mega Sundar | - | III – ECE |
| | | Ms.A.Muthulakshmi | - | III – IT |
| | | Mr.A.Nagarajalingam | - | III – Mech. |
| | | Ms.G.Nithya | - | III – CSE |
| | | Ms.V.Nithya | - | III – CSE |
| | | Ms.M.Ramya | - | III – IT |
| | | Ms.C.Sowmiya | - | II – IT |
| | | Mr.V.Tamilkumar | - | III – ECE |
| | | Ms.A.Thejaswini | - | II – CSE |
| | | Mr.M.Tirugnanam | - | III – CSE |
| | | Ms.S.Varshini | - | II – CSE |
| | | Ms.P.Vidhya | - | III – ECE |
| | | Mr.S.Vijaya Krishnan | - | III – ECE |
| | | Ms.A.Vijaya Priyanka | - | III – CSE |
| | | Ms.M.Vinothini | - | II – EEE |
| | | Ms.R.Yamini Rajam | - | III – EEE |
| | | Ms.G.Keerthikasri | - | II – CSE |
| | | Ms.M.Shanmugabharathi | - | II – CSE |

## 7. Support to the Students for Self e-Learning & Extension Services / Activities

Self-Learning can be challenging, even for the brightest and most motivated students. Students need various skills towards successful independent / self-learning study. In this regard, NEC Central Library has established Quality Improvement Cell (QIC) under the guidelines of Anna University, Chennai.

### 7.1 Quality Improvement Cell (QIC)

Since 2014, through Quality Improvement Cell (QIC), the faculty members and students are exposed to various resources such as SWAYAM NPTEL, IIT Madras, FOSS Courses, Spoken Tutorial, IIT Bombay and other video courses etc. for improvement in Teaching and Learning processes.

### 7.2 SWAYAM NPTEL Local Chapter (IIT Madras)

NPTEL, IIT Madras has been offering self-study courses across Engineering, Humanities and Science streams for more than a decade. Central Library took this initiative forward and encouraged more students and faculty members across the colleges to participate. NPTEL, IIT Madras has set up SWAYAM-NPTEL Local chapter in colleges. In NEC, Dr.K.Karunai Raghavan, Librarian of the college, acted as Single Point of Contact (SPOC).

### NPTEL Local Chapter 'AA' Rating

SWAYAM NPTEL, IIT Madras has recognized our College as a valuable NPTEL Local Chapter with a rating of 'AA' based on the performance in NPTEL Online Certification courses during January - June 2022. *[Rating of NPTEL Local Chapter: AAA (1-10), AA (11–50) and A (51-100)]*

Dr.K.Karunai Raghavan,
SPOC NPTEL Local Chapter &
Librarian has received
top performing
'SWAYAM NPTEL Local Chapters'
with a rating of 'AA' Citation from
IIT Madras held on
25th June 2022.

**SWAYAM NPTEL Toppers: January - December 2021 Session**

Faculty members and Students have been regularly attending the SWAYAM NPTEL Online courses to update their knowledge in the relevant field.

The following faculty members are SWAYAM NPTEL online exam Toppers during the period January – December 2021.

| Electronic Waste Management – Issues and Challenges | Geotechnical Engineering Laboratory | Analytical Chemistry | Introduction to Industry 4.0 and Industrial Internet of Things |
|---|---|---|---|
|  |  |  |  |
| Chithiraikumar, S. AP / S&H, 92% - 2% Topper | Balamaheswari, M. AP / Civil, 91% - 2% Topper | Dr.S.Thalamuthu AP (SG) / S&H, 88% - 5% Topper | Dr.J.Naskath AP (SG) / CSE, 84% - 1% Topper |

| Foundations of Cognitive Robotics | Demystifying Networking | Digital Circuits |
|---|---|---|
|  |  |  |
| Sivapalanirajan, M. AP / EEE, 80% - 5% Topper | Subramanian, K. AP (SG) / ECE, 77% - 2% Topper | Mariesh Preethi, J. AP / ECE, 75% - 5% Topper |

The following students are the SWAYAM - NPTEL online exam Toppers during the period January - December 2021.

| Fundamentals of Electrical Engineering | Work System Design |
|---|---|
|  |  |
| Akash, C. III - B.E. – EEE, 94% - 2% Topper | Ashok, M. III - B.E. – Mech., 90% (Elite + Gold) |

## SWAYAM NPTEL Results during Jan. – Dec. 2021 (Dept. wise)

| Sl. No. | Dept. | Appeared | | Certified | Success | Elite | Elite + Silver | Elite + Gold | Toppers |
|---|---|---|---|---|---|---|---|---|---|
| | | Students | Staff | | | | | | |
| 1 | S & H | 235 | 10 | 174 | 66 | 87 | 20 | 1 | 2 |
| 2 | Civil | 81 | 8 | 25 | 14 | 5 | 5 | 1 | 1 |
| 3 | E.C.E. | 63 | 17 | 69 | 18 | 42 | 9 | - | 2 |
| 4 | Mech. | 38 | 11 | 38 | 13 | 16 | 8 | 1 | - |
| 5 | C.S.E. | 40 | 7 | 29 | 15 | 12 | 2 | - | 1 |
| 6 | E.E.E. | 25 | 11 | 18 | 7 | 7 | 3 | 1 | 2 |
| 7 | I.T. | 6 | 3 | 5 | 2 | 2 | 1 | - | - |
| 8 | E.I.E. | | 1 | 1 | - | 1 | - | - | - |
| Total | | 488 | 68 | 359 | 135 | 172 | 48 | 4 | 8 |
| | | 556 | | | | | | | |

## SWAYAM NPTEL Results during Jan. – Dec. 2021 (Course wise)

| Sl. No. | Name of the Course | Appeared | Certified |
|---|---|---|---|
| 1 | Advanced Dynamics | 1 | 0 |
| 2 | Advanced Machining Processes | 2 | 2 |
| 3 | Advances in Welding and Joining Technologies | 1 | 0 |
| 4 | Aircraft Propulsion | 17 | 10 |
| 5 | Analytical Chemistry | 1 | 1 |
| 6 | Basic Linear Algebra | 1 | 1 |
| 7 | Basics of Materials Engineering | 1 | 1 |
| 8 | Basics of Software defined Radios and Practical Applications | 1 | 1 |
| 9 | Big Data Computing | 1 | 1 |
| 10 | Biological Inorganic Chemistry | 1 | 1 |
| 11 | Bioreactors | 2 | 2 |
| 12 | Cell Biology: Cellular organization, division and processes | 1 | 0 |
| 13 | Cloud computing | 3 | 3 |
| 14 | Data Base Management System | 5 | 4 |
| 15 | Data Science for Engineers | 1 | 1 |
| 16 | Deep Learning - IIT Ropar | 1 | 1 |
| 17 | Demystifying Networking | 3 | 3 |
| 18 | Design and Analysis of Algorithms | 1 | 1 |
| 19 | Design of Photovoltaic Systems | 1 | 1 |
| 20 | Design of Steel Structures | 1 | 1 |

| 21 | Developing Soft Skills and Personality | 59 | 13 |
|----|----------------------------------------|-----|-----|
| 22 | Digital Circuits | 21 | 9 |
| 23 | Earthquake Resistant Design of Foundations | 6 | 0 |
| 24 | Electrical Machines | 1 | 1 |
| 25 | Electromagnetic Theory | 1 | 1 |
| 26 | Electronic Waste Management - Issues And Challenges | 3 | 3 |
| 27 | Engineering Mathematics II | 1 | 1 |
| 28 | Enhancing Soft Skills and Personality | 239 | 166 |
| 29 | Experimental Physics II | 1 | 1 |
| 30 | Foundations of Cognitive Robotics | 1 | 1 |
| 31 | Fundamentals of Additive Manufacturing Technologies | 1 | 1 |
| 32 | Fundamentals of Electrical Engineering | 7 | 2 |
| 33 | Fundamentals of Electronic Device Fabrication | 1 | 1 |
| 34 | Fundamentals of Electronic Materials and Devices | 1 | 1 |
| 35 | Fuzzy Sets, Logic and Systems & Applications | 1 | 1 |
| 36 | Geotechnical Engineering Laboratory | 3 | 3 |
| 37 | Glass Processing Technology | 9 | 3 |
| 38 | Heat Exchangers Fundamentals and Design Analysis | 1 | 1 |
| 39 | Innovation by Design | 1 | 1 |
| 40 | Introduction to Algorithms and Analysis | 1 | 1 |
| 41 | Introduction to Industry 4.0 and Industrial Internet of Things | 61 | 52 |
| 42 | Introduction to Internet of Things | 2 | 2 |
| 43 | Introduction to Machine Learning - IITKGP | 1 | 1 |
| 44 | Introduction to Machine Learning IITM | 1 | 1 |
| 45 | Introduction to Operating Systems | 1 | 1 |
| 46 | Introduction to Operations Research | 1 | 1 |
| 47 | Introduction to Smart Grid | 2 | 2 |
| 48 | Matrix Method of Structural Analysis | 1 | 1 |
| 49 | Mechanics and Control of Robotic Manipulators | 1 | 1 |
| 50 | Microelectronics Devices to Circuits | 1 | 1 |
| 51 | Municipal Solid Waste Management | 26 | 5 |
| 52 | Nanomaterials and their Properties | 1 | 1 |
| 53 | Plant Cell Bioprocessing | 1 | 1 |
| 54 | Polymer Assisted Abrasive Finishing Processes | 1 | 1 |

| 55 | Power System Protection and Switchgear | 1 | 1 |
|----|------------------------------------------|-----|-----|
| 56 | Product Design and Development | 1 | 1 |
| 57 | Programming in Java | 1 | 1 |
| 58 | Psychology of Everyday | 1 | 1 |
| 59 | Python for Data Science | 6 | 5 |
| 60 | Reinforced Concrete Road Bridges | 1 | 1 |
| 61 | Remote Sensing and GIS | 10 | 7 |
| 62 | Signals and Systems | 2 | 2 |
| 63 | Software Testing | 1 | 0 |
| 64 | Solar Energy Engineering and Technology | 2 | 2 |
| 65 | Strength of Materials | 2 | 0 |
| 66 | Structural Analysis of Nanomaterials | 1 | 1 |
| 67 | Sustainable Engineering Concepts and Life Cycle Analysis | 2 | 2 |
| 68 | System Design through VERILOG | 1 | 1 |
| 69 | Techniques of Material Characterization | 1 | 1 |
| 70 | The Joy of Computing using Python | 1 | 1 |
| 71 | Work System Design | 16 | 15 |
| **Total** | | **556** | **359** |

## SWAYAM NPTEL Toppers: January - June 2022 Session

Faculty members and Students have been regularly attending the SWAYAM NPTEL Online courses to update their knowledge in the relevant field.

The following faculty members are SWAYAM NPTEL online exam Toppers during the period January – June 2022.

| Bioinorganic Chemistry | Python for Data Science | Scientific Computing using Matlab | Evolution of Air Interface Towards 5G |
|-----------------------|--------------------------|-----------------------------------|---------------------------------------|
|  |  |  |  |
| Dr.S.Thalamuthu Asso. Prof. / S&H, 98% 2% Topper | Dr.G.Sivakamasundari AP (SG) / CSE, 90% 1% Topper | Dr.S.Rosalin AP / S&H, 87% 5% Topper | Ganapathy Ram, B. AP (SG) / ECE, 83% 5% Topper |

| Surface Engineering of Nanomaterials | Medicinal Chemistry | Soil Structure Interaction |
|---|---|---|
|  |  |  |
| Dr.R.Harichandran<br>Prof. / Mech., 81% Topper | Dr.B.Annaraj<br>AP / S&H, 77% 5% Topper | Balamaheswari, M.<br>AP / Civil, 75% Topper |

The following students are the SWAYAM - NPTEL online exam Toppers during the period January - June 2022.

| The Joy of Computing using Python | | Technical English for Engineers | | Enhancing Soft Skills and Personality |
|---|---|---|---|---|
|  |  |  |  |  |
| Raafih Ahmad, S.<br>I - B.E. – ECE, 90% | Keshava, A.<br>I - B.E. – ECE, 90% | Keshava, A.<br>I - B.E. – ECE, 90% - 2% Topper | Bala Subramanian, M.<br>I - B.E. – CSE, 87% - 5% Topper | Kavish Golden, P.<br>III - B.E. – CSE, 87% - 5% Topper |

| Technical English for Engineers | | Enhancing Soft Skills and Personality | Cloud Computing |
|---|---|---|---|
|  |  |  |  |
| Agnes Vincy, J.<br>I - B.E. – EEE, 86% - 5% Topper | Andal Priyadharsini, R.<br>I - B.E. – ECE, 86% - 5% Topper | Tazveen Zanab, S.<br>I - B.E. – CSE, 86% - 5% Topper | Tirugnanam, M.<br>III - B.E. – CSE, 86% 2% Topper |

| Introduction to Industry 4.0 and Industrial Internet of Things | Cloud Computing | | Introduction to Industry 4.0 and Industrial Internet of Things |
|---|---|---|---|
| Petchiammal, S.<br>III - B.E. – CSE,<br>83%  - 2% Topper | Dhanarajan, G.<br>III - B.E. – CSE,<br>83% - 5% Topper | Karthick, B.<br>III - B.E. – CSE,<br>86% - 5% Topper | Manoj, S.K.<br>III - B.E. – ECE,<br>82%  - 2% Topper |

| Introduction to Industry 4.0 and Industrial Internet of Things | | Introduction to Industry 4.0 and Industrial Internet of Things | Introduction to Internet of Things |
|---|---|---|---|
| Keerthi Vasan, S.<br>III - B.E. – ECE,<br>86% - 2% Topper | Subitsha, A.<br>III - B.E. – ECE,<br>79% - 5% Topper | Madhan, C.<br>III - B.E. – CSE,<br>79% - 5% Topper | Pon Saravanakumar, S.<br>III - B.E. – EEE,<br>70%  -5% Topper |

**SWAYAM NPTEL Discipline Star**

The following faculty members have been recognized as NPTEL Discipline Star during the period July 2021 – June 2022..

| Computer Science & Engineering | Electrical Engineering | Computer Science & Engineering |
|---|---|---|
| Manimegalai, M.<br>AP / IT<br>(Jul – Dec 2021) | Sathishkumar, M.<br>AP (SG) / ECE<br>(Jul – Dec 2021) | Siva Sharma Karthick, P.G.<br>AP / IT<br>(Jan – Apr 2022) |

*[Candidates has to be certified in courses of same discipline, completed more than 50 weeks of learning.]*

## SWAYAM NPTEL Results during Jan. – Jun. 2022 (Dept. wise)

| Sl. No. | Dept. | Appeared Students | Appeared Staff | Certified | Success | Elite | Elite + Silver | Elite + Gold | Toppers |
|---|---|---|---|---|---|---|---|---|---|
| 1 | S & H | 681 | 22 | 532 | 167 | 268 | 93 | 4 | 8 |
| 2 | Civil | 114 | 7 | 54 | 28 | 22 | 4 | | 1 |
| 3 | E.C.E. | 250 | 6 | 167 | 42 | 89 | 36 | | 4 |
| 4 | Mechanical | 66 | 4 | 54 | 27 | 24 | 3 | | 1 |
| 5 | C.S.E. | 241 | 14 | 129 | 38 | 63 | 27 | 1 | 7 |
| 6 | E.E.E. | 72 | 5 | 55 | 9 | 33 | 13 | | 1 |
| 7 | I.T. | 64 | 4 | 53 | 37 | 14 | 2 | | |
| 8 | E.I.E. | | 1 | 1 | 1 | | | | |
| **Total** | | **1488** / **1551** | **63** | **1045** | **349** | **513** | **178** | **5** | **22** |

## SWAYAM NPTEL Results during Jan. – Jun. 2022 (Course wise)

| Sl. No. | Name of the Course | Appeared | Certified |
|---|---|---|---|
| 1 | Advanced Foundation Engineering | 1 | 1 |
| 2 | Advanced Probability Theory | 3 | 1 |
| 3 | An Introduction to Artificial Intelligence | 32 | 0 |
| 4 | An Introduction to Programming Through C++ | 6 | 0 |
| 5 | Applied Ergonomics | 22 | 13 |
| 6 | Bioinorganic Chemistry | 3 | 3 |
| 7 | Blockchain and its Applications | 75 | 11 |
| 8 | Cloud Computing | 67 | 59 |
| 9 | CMOS Digital VLSI Design | 2 | 2 |
| 10 | Computer Networks and Internet Protocol | 3 | 3 |
| 11 | Computer Vision and Image Processing? Fundamentals and Applications | 1 | 1 |
| 12 | Concrete Technology | 1 | 1 |
| 13 | Data Analytics with Python | 2 | 2 |
| 14 | Data Base Management System | 1 | 1 |
| 15 | Data Science for Engineers | 1 | 1 |
| 16 | Design and Analysis of VLSI Subsystems | 3 | 0 |
| 17 | Development and Applications of Special Concretes | 1 | 1 |
| 18 | Discrete Mathematics | 1 | 1 |

| 19 | Effective Writing | 11 | 10 |
|----|-------------------|-----|-----|
| 20 | Electric Vehicles - Part 1 | 1 | 1 |
| 21 | Electronic Packaging and Manufacturing | 12 | 10 |
| 22 | Electronic Waste Management - Issues And Challenges | 3 | 1 |
| 23 | Embedded Systems Design | 3 | 1 |
| 24 | Emotional Intelligence | 1 | 1 |
| 25 | Engineering Mathematics II | 2 | 2 |
| 26 | Enhancing Soft Skills and Personality | 81 | 36 |
| 27 | Entrepreneurship Essentials | 1 | 0 |
| 28 | Ethical Hacking | 70 | 23 |
| 29 | Evolution of Air Interface Towards 5G | 2 | 2 |
| 30 | Experimental Physics III | 1 | 1 |
| 31 | Foundations of Cryptography | 2 | 0 |
| 32 | Fundamental of Welding Science and Technology | 1 | 1 |
| 33 | Fundamentals of Nuclear Power Generation | 2 | 0 |
| 34 | Fundamentals of Spectroscopy | 1 | 1 |
| 35 | Fuzzy Sets, Logic and Systems & Applications | 1 | 1 |
| 36 | Graph Theory | 2 | 2 |
| 37 | Introduction to Civil Engineering Profession | 24 | 22 |
| 38 | Introduction to Database Systems | 1 | 1 |
| 39 | Introduction To Industry 4.0 And Industrial Internet Of Things | 104 | 99 |
| 40 | Introduction To Internet Of Things | 103 | 64 |
| 41 | Introduction to Machine Learning | 16 | 6 |
| 42 | Introduction to Machine Learning (Tamil) | 1 | 1 |
| 43 | Introduction To Programming In C | 1 | 0 |
| 44 | Leadership and Team Effectiveness | 36 | 25 |
| 45 | Literature and Life | 3 | 3 |
| 46 | Maintenance and Repair of Concrete Structures | 31 | 9 |
| 47 | Medicinal Chemistry | 2 | 2 |
| 48 | Natural Hazards | 28 | 28 |
| 49 | NBA Accreditation and Teaching and learning in Engineering | 1 | 1 |

| 50 | Online Privacy | 5 | 5 |
|----|----------------|---|---|
| 51 | Operation and Planning of Power Distribution Systems | 2 | 1 |
| 52 | Physical and Electrochemical Characterizations in Chemical Engineering | 1 | 1 |
| 53 | Principles of Signals and Systems | 1 | 1 |
| 54 | Problem Solving Through Programming In C | 5 | 1 |
| 55 | Product Design and Manufacturing | 41 | 37 |
| 56 | Programming In Java | 15 | 11 |
| 57 | Programming, Data Structures And Algorithms Using Python | 68 | 9 |
| 58 | Python for Data Science | 65 | 40 |
| 59 | Recent Advances in Transmission Insulators | 1 | 1 |
| 60 | Renewable Energy Engineering: Solar, Wind and Biomass Energy Systems | 1 | 1 |
| 61 | Robotics and Control : Theory and Practice | 1 | 1 |
| 62 | Scientific Computing using MATLAB | 2 | 2 |
| 63 | Soft Skill Development | 3 | 2 |
| 64 | Soil Structure Interaction | 1 | 1 |
| 65 | Solar Photovoltaics: Principles, Technologies & Materials | 26 | 2 |
| 66 | Surface Engineering of Nanomaterials | 2 | 2 |
| 67 | Systems and Usable Security | 2 | 0 |
| 68 | Technical English for Engineers | 406 | 386 |
| 69 | The Joy of Computing using Python | 129 | 85 |
| 70 | Urban Transportation Systems Planning | 1 | 1 |
| **Total** | | **1551** | **1045** |

## 7.3  FOSS, Spoken Tutorial, IIT Bombay: Workshops / Training & Online Test

NEC Central Library has organized various FOSS workshops and training programmes offered by the Spoken Tutorial, IIT Bombay during the period July 2021 to June 2022 funded by NMEICT, MHRD, Government of India, coordinated by Dr.K.Karunai Raghavan, Librarian.

✓ Dr.S.Chidambaram, AP (SG) / IT, acted as an organizer for FOSS Workshop on 'Advanced C++' through Spoken Tutorial, IIT Bombay held on 01st March, 2022. Nearly 62 students participated.

✓ Mr.S.Cammillus, AP (SG) / ECE, acted as an organizer for FOSS Workshop on 'C++' through Spoken Tutorial, IIT Bombay held on 02nd March, 2022. Nearly 60 students participated.

- ✓ **Mr.G.Pandiyarajan** AP/IT, acted as an organizer for FOSS Workshop on 'JAVA' through Spoken Tutorial, IIT Bombay held on 03$^{rd}$ March, 2022. Nearly 65 students participated.

- ✓ **Mr.I.Vivek Anand,** AP (SG) / ECE, acted as an organizer for FOSS Workshop on 'Linux' through Spoken Tutorial, IIT Bombay held on 04$^{th}$ March, 2022. Nearly 66 students participated.

- ✓ **Dr.V.Jackins,** AP (SG) / IT, acted as an organizer for FOSS Workshop on 'PHP & MySQL' through Spoken Tutorial, IIT Bombay held on 05$^{th}$ March, 2022. Nearly 61 students participated.

- ✓ **Mr.S.Daniel Raj,** AP / Civil, acted as an organizer for FOSS Workshop on 'Blender' through Spoken Tutorial, IIT Bombay held on 07$^{th}$ March, 2022. Nearly 47 students participated.

- ✓ **Ms.J.E.Jeyanthi,** AP / ECE, acted as an organizer for FOSS Workshop on 'Arduino' through Spoken Tutorial, IIT Bombay held on 08$^{th}$ March, 2022. Nearly 60 students participated.

- ✓ **Mr.S.Dheenathayalan,** AP (SG) / CSE, acted as an organizer for FOSS Workshop on 'Python' through Spoken Tutorial, IIT Bombay held on 09$^{th}$ March, 2022. Nearly 62 students participated.

- ✓ **Mr.R.Vigneshkumar,** AP / Mech., acted as an organizer for FOSS Workshop on 'QCAD' through Spoken Tutorial, IIT Bombay held on 10$^{th}$ March, 2022. Nearly 28 students participated.

**FOSS, Spoken Tutorial, IIT Bombay – Online Assessment Test**

- ✓ Free and Open Source Software (FOSS) Online Assessment test was conducted by Spoken Tutorial, IIT Bombay through online during July 2021 - June 2022 & the details were given below:

| Sl. No. | Name of the FOSS Course | Date of Exam | Name of the Invigilator | No. of Students Appeared | No. of Students Certified |
|---|---|---|---|---|---|
| 1 | Advanced C++ | 16.06.2022 | Mr.G.Pandiyarajan AP / IT | 80 | 79 |
| 2 | C++ | 17.06.2022 | Ms.J.E.Jeyanthi, AP / ECE | 64 | 59 |
| 3 | JAVA | 18.06.2022 | Dr.V.Jackins, AP (SG) / IT | 67 | 57 |
| 4 | Linux | 20.06.2022 | Mr.S.Dheenathayalan, AP (SG) / CSE | 48 | 33 |
| 5 | PHP & MySQL | 21.06.2022 | Dr.S.Chidambaram, AP (SG) / IT | 35 | 31 |
| 6 | Blender | 22.06.2022 | Mr.K.Subramanian, AP (SG) / ECE | 23 | 12 |
| 7 | Arduino | 23.06.2022 | Mr.S.Cammillus, AP (SG) / ECE | 65 | 62 |
| 8 | Python | 24.06.2022 | Mr.I.Vivek Anand, AP (SG) / ECE | 52 | 43 |
| 9 | QCAD | 27.06.2022 | Mr.K.Sudalaiyandi, AP / Mech. | 42 | 28 |
| **Total** | | | | **476** | **404** |

**Central Library Collections (upto May 31, 2022)**

| Library Collections | | Titles | Volumes |
|---|---|---|---|
| Book | | 24831 | 62201 |
| Reference Books | | 1005 | 1078 |
| Book Bank Books | | 718 | 3319 |
| Student's Projects (Since 2004) | | | 5362 |
| Back Volumes (Since 1993) | | | 3476 |
| Book's & Periodical's CDs | | | 3317 |
| NPTEL Videos | | | 24 TB |
| Dailies | | | 22 |
| **Periodicals** | | | |
| National Journals | | | 66 |
| International Online Journals | | | 538 |
| Technical Magazines | | | 41 |
| **E-Resources** | | | |
| E – Journals | Science Direct (Elsevier) | | 376 |
| | IEEE (ASPP) | | 162 |
| E – Books | EBSCO Engineering Core Collections | | 6567 |
| **Institutional Membership** | | | |
| DELNET (Developing Library Network) | | | |
| NDLI Club (National Digital Library of India Club) | | | |
| N-List (National Library & Information Services Infrastructure for Scholarly Content) | | | |
| e-Shodh Sindhu Consortia | | | |
| **Online Self-Learning Courses** | | | |
| SWAYAM – NPTEL, IITM, Chennai | | | |
| FOSS Courses, Spoken Tutorial, IIT Bombay | | | |
| Coursera | | | |
| **Question Bank (Since 2002 – Anna University & Since 2011 – Autonomous)** | | | |

# HIGHLIGHTS (Academic Year 2021 - 2022)

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

- It provides remote access using a User ID and Password for subscribed online journals.

- Sufficient number of systems are available in the e-Library section with Internet access facility to access the e-resources. Users can access it for educational, research and development purposes.

- During the Academic Year 2021 - 22 NEC Central Library Readers Park organized nearly 21 Technical and Non-Technical webinars and events

## SWAYAM NPTEL, IIT Madras:

| Period | Appeared | Certified | Success | Elite | Elite + Silver | Elite + Gold | Toppers | Ranking |
|--------|----------|-----------|---------|-------|----------------|--------------|---------|---------|
| Jan - Jun 2021 | 1551 | 1045 | 349 | 513 | 178 | 5 | 22 | AA |

## FOSS Courses, Spoken Tutorial, IIT Bombay:

| Period | Trained | Appeared | Certified |
|--------|---------|----------|-----------|
| Jun 2021 - May 2022 | 511 | 476 | 404 |

# NATIONAL ENGINEERING COLLEGE

**(An Autonomous Institution, Affiliated to Anna University, Chennai)**

**K.R.Nagar, Kovilpatti – 628 503, Thoothukudi District.**

https://nec.edu.in/

Estd : 1984

THIRU.K.RAMASAMY 1936 - 2019

**38** YEARS OF ACADEMIC EXCELLENCE 2021 - 2022

**nirf**
Rank 2021 **169**

**ARIIA**
Band - Excellent
10th Rank

**TNEA Counselling Code**
**4962**

AICTE
**Approved**

INSTITUTION'S INNOVATION COUNCIL
MOE Initative
**4 STAR RATING**

**DST - FIST**
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**NAAC**
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**NBA**
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**NewGen**
**IEDC,**
**DST, New Delhi**

**K.R.**
**Innovation**
**Centre**

## Courses Offered

B.E. - Mechanical Engineering ★
B.E. - Electronics & Communication Engineering ★
B.E. - Computer Science and Engineering ★
B.E. - Electrical and Electronics Engineering ★
B.Tech. - Information Technology ★
B.E. - Civil Engineering

M.E. - Energy Engineering
M.E. - Embedded Systems Technologies
M.E. - Computer Science and Engineering
M.E. - High Voltage Engineering
M.Tech. - Information Technology
           (Information & Cyber Warfare)