

St. XOVIER'S
CATHOLIC COLLEGE OF ENGINEERING
(Autonomous)

Chunkankadai, Nagerroil = 629003

Chunkankadai, Nagercoil - 629003 Kanyakumari District, Tamil Nadu Approved by AICTE & Affiliated to Anna University, Chennai
Accredited with 'A' Grade by NAAC

UG Programs(ECE, EEE, Mech, Civil, CSE & IT) Accredited by NBA

Recognized under section 2(f) & 12(B) of UGC Act, 1956 UG Programs(ECE, EEE, Mech, Civil, CSE & IT), MBA & MCA Programs Permanently Affiliated

Department of Humanities & Science Commitment towards excellence

# NEWSLETTER





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# DEPARTMENT OF HUMANITIES & SCIENCE

COMMITMENT TOWARDS EXCELLENCE

**NEWSLETTER** 

2022-2023



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#### DEPARTMENT OF HUMANITIES AND SCIENCE

### **Commitment towards excellence**

The Department of Humanities and Sciences of St.Xavier's Catholic College of Engineering give importance to impart excellent technical knowledge to install in to the young minds a wide perspective of social and spiritual values. It is a welcoming place with a purposeful atmosphere appropriate for learning mingled with cultural and moral. It provides endless opportunity for individual personality development through enrichment activities, extension activities educational visits and sports. This letter of our department outlines the multidimensional aspects carried out during the year 2022-2023.

#### Vision:

To serve as a forum for enriching the knowledge of the students in humanities and science arena to excel in engineering education that would bring technology and society.

## **Mission:**

The department of humanities and sciences seeks to lay a strong foundation in basic sciences and basic engineering, besides developing competency in English language skills and also to mould the fresher's in to wholesome personalities through enriching and motivational programme and there by assisting them realize their inner potential and the commitment to society.

## **OFFICE BEARERS**

President - Dr. J.Judson, First year Co-ordinator/HSc

Faculty Advisor - Dr. J.P.Vidhya, Asst. Prof./HSc

Secretary - Aarthi M A - CSE A

Joint Secretary - Raihan A Babu- Mechanical

Treasurer - Solomon Antony -IT

## **Executive Members:**

Jed Gershon - S - ECE A

Akash R K - ECE B

Jegil Tiffania - CSE B

Ashika S- EEE

Adith Krishnan S C-Civil

Giftlin Dershiya - Al

## STUDENT INDUCTION PROGRAM (2022-2023)

Transition from school to college life is one of the most challenging events in a students' life. When new students enter an institution, they come with diverse thoughts, backgrounds and preparations. Induction program helps the students to open up, think creatively and become responsible and independent students.

The Purpose of Student Induction Program is to help the new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self-exploration.

Student Induction Program engages with the new students as soon as they come into the institution before regular classes start. At the start of the induction, the incumbents learn about the institutional policies, processes, practices, culture and values.

#### **OBJECTIVES:**

- 1. This course is mandatory for all the fresh students admitted in any UG Degree Program offered by the college.
  - 2. To help the students feel comfortable in the new environment and adjust to the customs and practices of the college.
  - 3. To enable the students to become familiar with the amenities and accessing the intellectual and physical resources of the institutions
  - 4. The main aim of the programme is to instil the ideas, practices and spirit of St. Xaviers Catholic College of Engineering and its unique features.
  - 5. To enable the students to understand and have better relationship with the faculty members for setting the pace of fruitful teaching learning experiences.

6. Giving attention to stimulating social integration of students among themselves and with teachers.

The Student Induction Programme for the First year newly admitted students was conducted from 10th August to 30th August 2022. The Program was conducted in offline mode. The branches involved are Electronics and Communication Engineering (ECE), Computer Engineering (CSE), Information Technology (IT), Electrical and Electronics Engineering (EEE), Mechanical Engineering (MECH), Civil Engineering (CIVIL), and Artificial Intelligence and Data Science (AI&DS).



## **HUMAN VALUE BASED STUDENT INDUCTION PROGRAM**

(2022-23)

Articulated in the AICTE Model Curriculum, one of the key measures is the incorporation of education on human values. As per the curriculum a two-week Student Induction Program (SIP) based on Universal Human Values (UHV) has been conducted from 7/11/22 to 17/11/22. The two-week SIP is to prepare newly admitted undergraduate students for the new stage in their life by facilitating a smooth transition from their home and school environment into the college and university environment through various discussions and activities. The Purpose of the Human Value Based Student Induction Program is to learn help the new students adjust and feel comfortable in the new environment, inculcate in them the ethos and culture of the institution, help them build bonds with other students and faculty members, and expose them to a sense of larger purpose and self-exploration.

#### **OBJECTIVES:**

The objective of the course is given below:

- 1.To develop a holistic perspective based on self-exploration about themselves (human being), family, society and nature/existence.
  - Understanding (or developing clarity) of the harmony in the human being, family, society and nature/existence.
  - Strengthening of self-reflection.
  - Development of commitment and courage to act.

The Human Value Based Student Induction Programme for the First year newly admitted students was conducted from 7th November to 17th November 2022. The Program was conducted in offline mode. The branches involved are Electronics and Communication Engineering (ECE), Computer Engineering (CSE), Information Technology (IT), Electrical and Electronics Engineering (EEE), Mechanical Engineering (MECH), Civil Engineering (CIVIL), and Artificial Intelligence and Data Science (AI&DS).

To make the curriculum easier the basics of the optional subjects such as Physics, Maths, Chemistry, English and Computer was added to the SIP. Motivational talk on Self learning, Personality Development and Leadership was also conducted by various personalities.

To develop the practical knowledge of the students laboratory sessions for Physics, Chemistry and Computer was also conducted. Apart from the subject knowledge, Special Programs such as Way to Success and Virtues of Life was conducted by various personalities. Inorder to ensure the health and safety of the students special programmes on Health Care and hygiene and First aid, Mental and Emotional well being was also arranged through St Xavier's Nursing college and Kumaraswamy Nursing college.

To raise the concerns of youth with an aim to provide them a platform where they can discuss their issues with each other and finds the solutions of their problems, and to exchange ideas and skills to strengthen their networking a special program on Youth Awareness by the Centre of Lights was conducted through the Counselling cell of SXCCE. An awareness program for the NSS, NCC, YRC, Sports and Hiltek was also conducted in a smooth manner.



## **SHAX Inauguration**

The Inauguration of SHAX 'was conducted on 15/12/2023 at 10am in the Conference hall. The program started with the prayer song. Joint secretary of SHAX welcomed the gathering. The Faculty Advisor Dr.Vidhya J P introduced the new office bearers for this academic year. The annual report was presented by the Secretary of SHAX. Dr.D.Judson, Coordinator of H&Sc introduced the chief guest. Dr.J.Mary Gladis , Associate Professor, Dept of Chemistry, IIST, Trivandrum , gave the chief guest address. Felicitations were given by the Principal, Dr.J.Maheswaran and the Bursar, Rev.Fr.M.Francis Xavier. Presidential address was given by the Correspondent, Rev.Fr. M.Maria William. The treasurer of

SHAX rendered vote of thanks. The meeting came to an end by the college anthem.



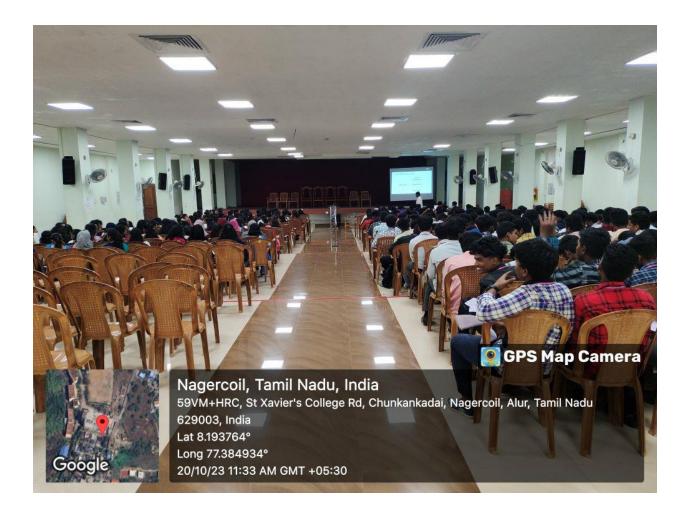
## First Year Inauguration

The Inaugural ceremony of the 25th batch, BE/ B.Tech Programmes of St. Xavier's Catholic College of Engineering was held on 18th November 2022. Rev. Fr. S.Jesu Retnam the Contact Person of the Diocese of Kuzhithurai and the President of the Governing council of St. Xavier's Catholic College of Engineering presided over the ceremony. Mr.Siva kumar palaniappan, Mindset Mastery Expert, Executive Leadership Coach, highlighted the programme with his very presence.

The ceremony began with a prayer song and a welcome dance. Rev Dr M Maria William, the correspondent of the college welcomed the gathering. Dr J Maheswaran, the Principal of the college introduced the college. The dignitaries on the dais inaugurated the ceremony by lighting the lamp. Reading from the holy scriptures were read followed by prayer and offering, by the first year students. First year students were asked to take oath lead by Dr D.Judson, the first year Coordinator. Rev. Fr. S.Jesu Retnam, gave an inaugural address highlighting the commitment of the students. Dr M. Marsaline Beno, Dean/Research, introduced the Chief Guest. Mr.SivaKumar Palaniappan, the Chief Guest of the day inspired the students with his Motivational Talk. Two students from final year CSE and IT shared their experience at SXCCE. The college Magazine "PRO CONZERVE" for the academic year 2021-2022 was released by the Contact person Rev. Fr. S.Jesu Retnam and received by our chief guest Mr.Sivakumar Palaniappan. Rev.Fr. Francis Xavier, the Bursar, felicitated the Gathering. DrJ.Christus Jeya Singh, the Vice Principal proposed the vote of thanks. The college choir sang the college Anthem. Fine Arts Students entertained the gathering with dances and orchestra. The Program ended with the National Anthem.

## **HIGHER ORDER THINKING**

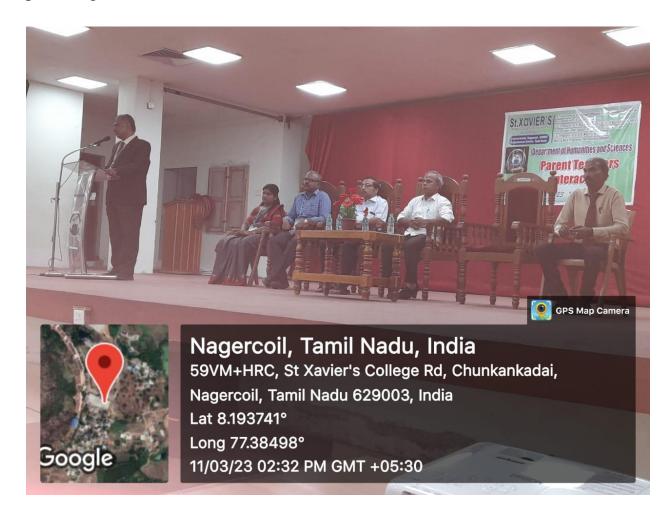
As per the curriculum, a one credit course on, "Higher Order Thinking" was added to the syllabus of the first year. Inorder to improve the students critical and creative thinking skills, a session on the same topic was conducted for five days from 27/2/2023 to 3/3/2023. The session was handled by an eminent personality, Dr. S.Lourdunathan, Associate Prof &Head, Department of Philosophy, Arulanandhar College, Madurai. The session was interesting and it enables the students to enhance the problem solving skills which is required for an engineer. The resource person gave various activities to the students to make the session a lively one. Students gained knowledge on deductive and inductive problem solving skills and how to figure out the problems in an easier manner. He also explained about the reasoning ability which can be asked in exams such as GATE. Students enjoyed the sessions and finally the session ended on 3<sup>rd</sup> March. Mrs.Adline Aruna, Asst Prof, Department of English proposed the vote of thanks.



## **Parent Teachers Interaction**

The Parent Teachers Interaction meeting of the first year students was conducted on 11/03/2023 at 2.30 pm in the Conference hall. The meeting started with the prayer song. The PTI Coordinator of first year, Dr.S.Sheen Kumar welcomed the gathering. The Coordinator of H&Sc, Dr. D.Judson, gave a brief output of the departmental activities. The Principal explained the salient features of autonomous. So many questions and suggestions were raised during the interaction session with the parents. The Principal gave a detailed explanation for all the questions raised. Presidential address was given by the Correspondent, Rev.Fr. Dr.M.Maria

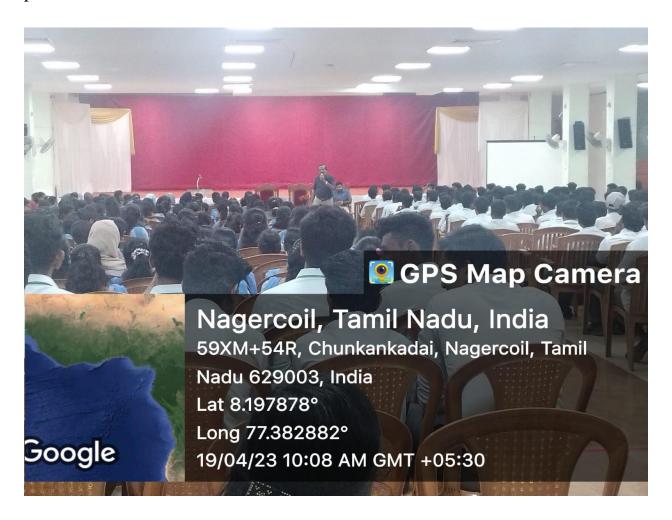
William. The Faculty Advisor of SHAX, Dr.Vidhya J P proposed the vote of thanks. The meeting came to an end by 3.30pm with the college anthem. After the meeting the parents met the concerned faculty to get the marks and attendance percentage of their children.



## Seminar on Engineering Physics with life applications

A Seminar on "Engineering Physics with life applications" was conducted on 19<sup>th</sup> April at the Conference hall for the first year students. Mr.J.Chittanandha, a senior Physics teacher was the Resource person. The program started at 10 am with the prayer song. Dr.Amal J Eronimus, AP/Placement and Training cell proposed

the welcome address. Dr. Vidhya J P, AP/ English, introduced the chief guest. The chief guest motivated the students through his inspiring words. Students had an interactive session with the resource person. The session came to an end at 12.15 pm.



## **Industrial Visit**

Students of the first year UG underwent an industrial visit to UST Global, Trivandrum Students were given a session on the overview of UST Global and then about the recruitment process of UST. Mr.Sthanu, the senior expert of UST handled the session in a great manner. After the session the students were splitted into teams and the representatives took the students to a campus tour. The students enjoyed the tour and learned many things about UST.



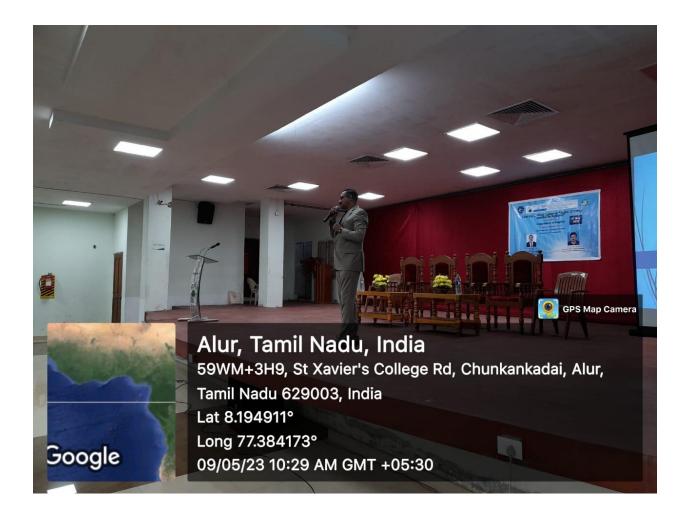


## National Seminar on "English Language Learning for Engineers"

The Department of English organized a one day National Seminar on "English Language Learning for Engineers" on 9<sup>th</sup> May at the Conference hall. The main objective of the seminar is to make the students to know the importance of English language. The seminar begins with an inaugural session. Dr. Vidhya J P, Asst .prof, Department of English welcomed the gathering. The Principal Dr.J.Maheswaran addressed the gathering with his inaugural address. Dr.M.Maenu, AP/Dept of English, introduced the chief guest, Dr.Pradeep.S.Raj, AP/Kristu Jayanti College, Bangalore. The chief guest

briefed out the need of English language for Engineers and he was honored by the Correspondent. In his Presidential address, the Correspondent, Rev.Dr.M.Maria William point out the importance of English language. Finally the inaugural session ends up at with the vote of thanks by Mrs.Adline Aruna, AP/Dept of English.

The first session starts by 10 am with the presentation of Dr.Pradeep. He explained the importance of English and English proficiency for Engineering students. He gave an eye opening session for the students. The second session starts at 11.15 am with the Resource person , Dr.Tibi Thomas , AP/NMCC, Marthandam. He was welcomed by Dr.Vidhya J P, AP/Dept of English. He explained the various features of language which comprises stress, intonation and pause. He was honored by Dr.James Ligorios, communication Skills Trainer/SXCCE. Finally the session came to an end by 12.30 pm.



# **Chemistry Conference**

The 4th International Conference on Advances in Sustainability of Materials and Environment (ICASME'23), which was held on May 25 and 26, 2023, in Nagercoil, Tamil Nadu, India. The conference was organized by the departments of civil engineering and chemistry at St. Xavier's Catholic College of Engineering.

ICASME'23 was created to give academic, research, scientific, and business specialists a forum for exchanging and disseminating ideas regarding the most recent developments in science and technology. The conference's main emphasis was on the interactions between theory, implementation, research applications, etc. in the relevant field, which produced collaborative

R&D projects and new project proposals that ultimately led to knowledge exchange among researchers and faculty members. Let me acknowledge that the conference was an effective endeavor to spread information within its community.

The International conference is technically Co-Sponsored by IET, Reach and SHAX.

In order to reach a global audience, a website, <a href="https://www.sxcce.edu.in/iwcasme23/">https://www.sxcce.edu.in/iwcasme23/</a> was hosted in the month of December 2022, and a brochure was released on 9<sup>th</sup> february, with the blessings of our Correspondent Rev. Dr. M. Maria William and the support of our Principal Dr. J. Maheswaran.

The keynote addresses given by specialists in Civil Engineering, Chemistry, Material Science, and Intellectual Property Right are what will make the conference come alive. Dr. S.T. Ramesh, Head of the Department of Civil Engineering at the National Institute of Technology in Trichy, gave a keynote address on "Advances in the Sustainability of Materials and the Environment" on May 25, 2023 Forenoon. Dr. Mohamed Abdul Mannan, a Malaysian professor at Universiti Malaysia Sarawak, spoke about "Agriculture and Industrial Wastes as Renewable Resources for Medium Strength Self-Compacting Concrete" that same day in the afternoon. The first plenary speech was given on "Intellectual Property Rights and its role in technology developments" on May 26 at noon by Dr. P. Arumugam, founder and CEO of Mark IPServices, an Indian patent agent in Chennai, India. A second Keynote address on "Circular Economy and Sustainability of Metallic Materials" was also given in the afternoon by Dr. T.P. D. Rajan, Senior Principal Scientist, CSIR NIIST, Thiruvananthapuram.

In the fields of Civil Engineering, Chemistry, Renewable energy sources, Soft computing methods, Material Science, and Environmental Studies, ICASME'23 has covered a variety of topics. Each topic was broken down into one of six categories: Civil and Building Science, Chemistry and Physical Science, Energy Efficient Technologies, Mathematical Modelling and Soft Computing Techniques, Material Science, and Environmental Science. The research articles were subsequently categorized. 86 research papers in total were registered, and they were all presented in four sessions across four locations.

In addition to participants from Tamilnadu, delegates from Oman and Tanzania as well as different regions of the country, particularly Rajasthan, Odissa, Delhi, Uttar Pradesh, West Bengal, Karnataka, Telungana, Kerala, Andra Pradesh, Punjab, etc., benefited from the conference. This was followed by effective publicity and ongoing mobilization.

ICASME'23 covered a wide range of topics including civil engineering, chemistry, renewable energy sources, soft computing techniques, material science, and environmental studies. All of the topics were grouped under six themes including civil and building science, chemistry and physical science, energy efficient technologies, and mathematical modelling. All of the accepted research papers were published in Conference proceedings ICASME'23 with ISBN no. 978-93-5811-584-0.

The members of the various committees, such as the Advisory committee, Programme committee, and Organising committee, consistently provided support and guidance that contributed to the conference's success. A significant part of the success story was also the caliber of the research publications. All approved papers will undergo peer review by a team of reviewers before being published in journals with a Scopus index. Civil engineering, chemistry, alternative energy sources, soft computing methods, material science, and environmental studies were only a few of the topics presented at ICASME'23. Six categories, including civil and building science, chemistry and physical science, energy-efficient technologies, and mathematical modelling, were used to organize all of the topics.





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#### DEPARTMENT OF HUMANITIES AND SCIENCES

## SCIENCE AND HUMANTIES ASSOCIATIONOF XAVIER'S (SHAX)

#### ANNUAL REPORT

#### ACADEMIC YEAR 2022-2023

Every new beginning comes from some other beginnings end.....

I am pleased to present the 25<sup>th</sup> Annual Report on the activities and achievements of SHAX, Science and Humanities Association of Xavier's of the academic year 2022-2023. The Department of Humanities & Sciences encourages the students of all disciplines not only in their academic pursuit but also in furthering their career prospects and giving impetus to their creative potentiality. In addition to that the association inculcate ethical values and promote social responsibility through an innovative learning process in basic sciences and humanities. It also provides students with soft skills and behavioral training programs in order to develop their overall personality and social consciousness. Apart from science subjects the department also strengthens the liberal education of students by developing a deepened understanding of language, the value of critical reading and effective writing.

I am happy to report that during the above period, our Institution is granted with fresh Autonomous status. This academic year starts with a student induction program inorder to help the new students adjust and feel comfortable in the new environment from 10th August to 30th August 2022. With continuation to that a two-week Student Induction Program (SIP) based on Universal Human Values (UHV) was conducted from 7<sup>th</sup> November to 17<sup>th</sup> November.

The Inaugural ceremony of the 25th batch, BE/ B.Tech Programmes of St. Xavier's Catholic College of Engineering was held on 18th November 2022. Rev. Fr. S.Jesu Retnam the Contact Person of the Diocese of Kuzhithurai and the President of the Governing council of St. Xavier's

Catholic College of Engineering presided over the ceremony. Mr.Siva kumar palaniappan, Mindset Mastery Expert, Executive Leadership Coach, highlighted the programme with his very presence.

The Inauguration of SHAX' was conducted on 15/12/2023 at 10am in the Conference hall. The Faculty Advisor introduced the new office bearers for this academic year. The annual report was presented by the Secretary of SHAX. Dr.J.Mary Gladis, Associate Professor, Dept of Chemistry, IIST, Trivandrum, was the chief guest.

For creating an opportunity to interact with the industry experts we have taken our first year Students to UST Global, Trivandrum on 3<sup>rd</sup> February and 8<sup>th</sup> May. Inorder to improve the students critical and creative thinking skills, a session on "Higher order thinking" was conducted for five days from 27/2/2023 to 3/3/2023. by an eminent personality, Dr. S.Lourdunathan, Associate Prof &Head, Department of Philosophy, Arulanandhar College, Madurai.

To build a strong relationship with the parents and to promote the well being of the children a Parent Teachers Interaction meeting was conducted on 11/03/2023 at 2.30 pm in the Conference hall. A Seminar on "Engineering Physics with life applications" was conducted on 19<sup>th</sup> April at the Conference hall for the first year students. Mr.J.Chittanandha, a senior Physics teacher was the Resource person.

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The Department of Chemistry is association with the Department of Civil engineering organized an International Conference on Advances in Sustainability of Materials and Environment (ICASME'23) on May 25 and 26. The keynote addresses were given by the eminent specialists in Civil Engineering, Chemistry, Material Science, and Intellectual Property Right. Nearly 86 papers were presented by the authors.

Let me render my heartfelt gratitude to the Coordinator Dr.D.Judson for always being my greatest supporter throughout the year. I also thank all the faculty members and staff members of the Department of Humanities and Sciences, for their valuable cooperation and support.

"The journey is never ending. There's always gonna be growth, improvement, adversity let's all continue to grow ......"



Dr.VIDHYA J P

Faculty Advisor, SHAX

(2022-2023)