PROSPECTUS



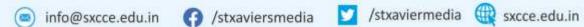


TECHNICALLY EMPOWERED HUMANE SOCIETY



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

Chunkankadai, Nagercoil - 629 003, Kanyakumari District, Tamil Nadu, India. 04652-232560, 259662, 227803, 224033, 237361 | 9487792560









CATHOLIC COLLEGE OF ENGINEERING (Autonomous)

Chunkankadai, Nagercoil - 629 003 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



About College

St. Xavier's Catholic College of Engineering (SXCCE) is owned, administered and run by the Roman Catholic Diocese of Kuzhithurai. Started in 1998, it vibrates with the vision of 'Creating a Technically Empowered Humane Society' by offering cutting edge technical and managerial education to the rural youth of Tamil Nadu and beyond.

SXCCE has seven undergraduate and eight postgraduate programs, besides seven University recognized research departments. All the Programs are approved by All India Council for Technical Education (AICTE). All the UG, MBA and MCA programs have permanent affiliation of the Anna University, Chennai. Accreditations by NAAC and NBA are the testimony for the quality higher educational service of the college. NAAC accredited the college with grade "A" on 12-09-2017 and is now extended up to December, 2027. NBA accredited the UG programs EEE, ECE and ME under tier-II category for the validity period from 2018-2019 to 2020-2021 and currently, the validity is extended up to June, 2025. The remaining three UG programs CSE, CE & IT were accredited by NBA under tier-II category for the

validity period from 2021-2022 to 2023 -2024. The College has been granted with fresh autonomous status by UGC for a period of 10 years from the year 2022-2023. The college is recognized under 2(f) and 12(B) of the UGC act 1956 from 08-06-2018. The college has all the necessary infrastructural facilities as per the stipulation of the government to impart technical and managerial education of the highest standard. All the departments have updated and well equipped laboratories.

SXCCE is passionately committed to impart excellent technical knowledge and utmost care is also taken to instill into the young minds a wider perspective of social and spiritual values, thereby enlightening them to become committed nation builders and exemplary citizens.

SXCCE is located at the lap of the Western Ghats at Chunkankadai in Kanyakumari District of Tamil Nadu, overlooking the Nagercoil-Thiruvananthapuram National Highway (NH 47). Lush green paddy fields and plantain farms spread their arms around the college and gentle breeze caresses it.

The Vision

To be an institution of eminence of optimal human development, excellent engineering education and pioneering research towards developing a technically empowered humane society.

The Mission

To transform the (rural) youth into top class professionals and technocrats willing to serve local and global society with ethical integrity, by providing vibrant academic experience of learning, research, innovation and stimulating opportunities to develop personal maturity and professional skills, with inspiring and high caliber faculty in a quality and serence infrastructural environment.



The Quality Policy

Attaining global eminence, by achieving excellence in all that we do in life, education and service.



Programs Offered

UG Programs

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

PG Programs

- M.E. Energy Engineering
- . M.E. Computer Science and Engineering
- M.E. Communication Systems
- M.E. Power Electronics and Drives
- M.E. Medical Electronics
- · M.E. Structural Engineering
- MBA Master of Business Administration
- MCA Master of Computer Applications

Research Programs (Ph.D.)

- Mechanical Engineering
- · Electrical and Electronics Engineering
- Electronics and Communication Engineering
- · Computer Science and Engineering
- Civil Engineering
- Computer Applications
- Physics

Accreditations & Major Recognitions

- · Conferred with Autonomous Status from the academic year 2022-2023 for the next 10 years by UGC
- · Accredited with 'A' grade by National Assessment and Accreditation Council (NAAC)
- Accredited by National Board of Accreditation (NBA)
- for UG Programs EEE, ECE & MECH [Tier II, 2018-2019 to 2021-2022] and validity is extended up to June 2025.
- for UG programs CSE, CE & IT (Tier II, 2021-2022 to 2023-2024)
- UG Programs (ECE, EEE, Mech, Civil, CSE & IT), MBA & MCA Programs Permanently Affiliated
- Recognized under section 2(f) & 12(B) of UGC Act, 1956











Objectives

- · To transform our students into fully-functioning human persons and empowering leaders with autonomy and passion for continuous self-learning
- To equip them with contemporary scientific and technical knowledge with student centered teaching methods
- To animate them into pioneering researchers and investors
- · To train them to excel with cutting edge technical, entrepreneurial and managerial skills for a successful career
- · To expose them to challenging opportunities of self-discovery and to commit themselves to lead a value-based life of humane service
- · To recruit faculty members who inspire the students with their passion for knowledge and transmit knowledge to the students by student-centered creative and innovative teaching and learning methods, lead them by example in high-end researchers, and edify the students with their life of integrity and ethics
- To provide standard infrastructure, serene and stimulating environment that is most conducive to learning
- . To develop avenues of continuous and responsive collaboration with stakeholders for the optimal development of the students and institution



Values

Excellence that leads to eminence Genuineness that leads to authenticity Transparency that leads to credibility Person centeredness that leads to family-ness Appreciation that leads to high motivation Altruism that leads to humane service Critical thinking that leads to scientific approach Fidelity that leads to responsibility Knowledge that leads to wisdom Innovative research that leads to inventions Hardwork that leads to achievements Eco friendliness that leads to protection of nature Aesthetic campus that leads to serene environment Fiscal discipline that leads to economic sustainability Feedback that leads to responsivity Spirituality that leads to committed service



ADMINISTRATION

Most. Rev. Antony Pappusamy Chairman & Bishop-in-Charge, R.C. Diocese of Kuzhithurai

Archbishop Most. Rev. Antony Pappusamy was born on October 1, 1949 in Marambady in Dindigul Diocese. He was ordained a priest on July 7, 1976 incardinated into the Diocese of Trichy.

He was consecrated as a Bishop on February 4, 1999 and served as the Auxiliary

Bishop of Madurai from February 4, 1999 to November 10, 2003; also became the Titular Bishop of Zaba on February 4, 1999. He was appointed the first Bishop of Dindigul on November 10, 2003.

On July 26, 2014, on the Feast Day of Saints Parents Joachim and Anne, Pope Francis appointed Bishop Most Rev. Antony Pappusamy as the Archbishop for the Archdiocese of Madurai. On August 24, 2014 the Bishop took the canonical possession of the Archdiocese in the presence of the Apostolic Nuncio to India, Most Rev. Salvatore Pennacchio at the Solemn Episcopal Mass celebrated at St. Britto School ground, Gnanaolivupuram, Madurai.

He is also the President of Tamil Nadu Bishops' Conference. On June 29, 2018 the Holy See appointed him also the Apostolic Administrator of the Diocese of Palayamkottai.

Rev. Fr. S. Jesu Retnam

Contact Person, R.C. Diocese of Kuzhithurai President, Governing Council



Rev.Fr.S.Jesu Retnam is the Vicar General of the R.C. Diocese of Kuzhithurai. He pursued his studies in Philosophy and Theology at St.Paul's Seminary, Trichy. He was ordained in 1977. He has served as Vicar Forane of Mulagumoodu circle. He has held many posts like Coordinator of Commissions and Priests Personal Board Director. He has served in many positions as Director of Diocesan Catechism, Don Bosco Youth Centre Director, etc., and nurtured many young minds and priests. He has vast experience as Parish Priest in many parishes. He is very humble and easily approachable.

Rev. Fr. Dr. M. Maria William

Correspondent



Rev. Fr. Dr. Maria William, the Correspondent of the College, belonging to the Diocese of Kuzhithurai, is engaged in pastoral and educational ministry since his ordination in 1988. He finished Ph.D. in Developmental Psychology from the University of the Philippines, Diliman, Manila. Besides his pastoral ministry in several parishes and service as correspondent of different schools, he also serves as a psychological counselor and trainer. He has authored two books and many articles. He has served Catholic Priests Conference of India(CPCI) as the secretary. He was the co-correspondent of St.Xavier's Catholic College of Nursing and was teaching Psychology there.

Dr. J. Maheswaran Principal



Dr. J. Maheswaran, Principal of St. Xavier's Catholic College of Engineering completed his B.E. in Civil Engineering

from Alagappa Chettiar College of Engineering, Karaikudi, M.E. Structural Engineering from Thiagarajar College of Enginee-ring, Madurai and Ph.D. from Manonmaniam Sundaranar University, Tirunelveli. He has 35 years of Teaching and Administrative experience in reputed Institutions, out of which 14 years exclusively as Principal. He is the recipient of Eminent Engineer Award, Best Academic Administrator Award and Life Time Achievement Award for Excellent Services in Academics of Civil Engineering. He is acting as a member of Academic Council of Anna University and its standing Committee. He also served as a member in the Academic Council and NSS Advisory Cell of Anna University of Technology, Tirunelveli and Board of studies of Civil Enginnering and Sports Board of Anna University, Chennai. He published 17 papers in Journals and 32 papers in Conferences. He bagged State level First Rank in Tamil in S.S.L.C. Examination.

Rev. Fr. M. Francis Xavier

Bursar



Rev. Fr. M.Francis Xavier, the Bursar of the College, is a Catholic Priest belonging to the R.C. Diocese of Kuzhithurai. He pursued his studies in Philosophy at Vijanana nilayam Degree College, Eluru, AP and Theology at the St. Peter Pontifical Seminary, Bangalore. He was ordained a priest in 2016 and has been engaged in pastoral ministry and educational services. He enjoys meeting people and renders services according to the needs of the individuals and groups.



Dr. V. Christus Jeya Singh Vice Principal & Dean-Student Affairs



Dr. M. Marsaline Beno Dean - Research



Dr. A. Milton Controller of Examinations



Dr. R. S. Shaji Dean - Systems



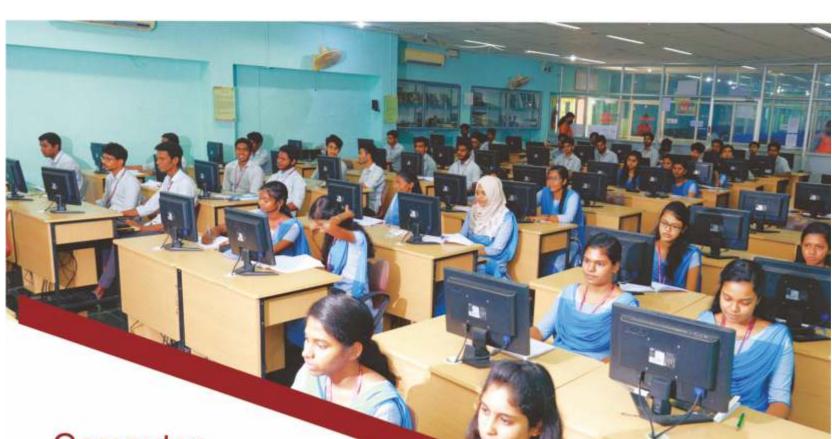
Dr. R.P. Anto Kumar Dean - Academics



Dr. J. Annrose Coordinator-IQAC



Mr. M. Anto Xavier Roche
Dean - Student Futuristic Services



Computer Science and Engineering



Mrs. P. R. Sheebha Rani lead, Department of Computer Science and Engineering

The Department of Computer Science and Engineering was established in the year 1998 with the program B.E. Computer Science and Engineering. The student intake was increased from 40 to 60 in 1999, again increased to 90 in 2001 and increased to 120 in 2007. M.E. Computer Science and Engineering program was introduced in 2010 and its intake was increased from 18 to 24 in 2013.

The department has been accredited by the National Board of Accreditation (NBA), New Delhi [Tier II, 2021-2022 to 2023-2024].

This department is energized by 25 faculty members with post graduate qualifications including 9 doctorates and 5 supporting staff members. Dedicated faculty members and availability of latest licensed software provide stimulating atmosphere to the students to excel in all aspects of academic research and to enhance their general skills in logical and analytical understanding.

The department has 4 highly sophisticated and well equipped computer laboratories with 226 latest configuration computers, 7 servers and its own private cloud infrastructure. It offers the best and updated practical training with modern high configuration computing systems to develop high quality technical knowledge and to tackle the problems of the next

The research program Ph.D. in Computer Science was introduced in 2011 and till now 16 scholars have been awarded the degree and 40 scholars are pursuing their research under this department. More than 200 research articles have been published in various reputed international journals. It is recognized as one of the renowned research departments for its faculty and infrastructural facilities.

Regular industrial visits and study tours

are arranged in this department to various organizations like Cognizant Technology Solutions, UST Global, Thumba Rocket Launch Station and VSSC, Keltron, ISRO Mahendragiri, SDSC SHAR Sriharikota.

Towards empowering the students training, this department has MoUs with various leading organizations like Oracle Academy, EMC, VMWare, Amazon Web Services, Palo Alto, Sales force, ICT Academy and FortInet.

In order to exhibit the talents of the students, the Association of Computer Engineers (ACE) is actively organizing special lectures, power seminars, workshops, symposiums and International conferences. This association is dedicated to expand the ability of students in the field of Computer Science and Engineering. ACE, since its start, has been a hallmark in our college. ACE has always strived to fulfil its motto "Awake, Arise, Achieve".

Electronics and Communication Engineering



Dr. S. Caroline Head, Department of Electronics and Communication Engineering

The Department of Electronics and Communication Engineering was established in the year 1998 with intake of 40 students. Gradually the intake increased to 60 and currently we have an intake of 120 students. The department aims at developing technically competent **Electronics and Communication Engineers** with academic excellence, innovative research, ethical standards and international outlook to serve the society. The main focus is to make the students blossom into meritorious and selfdisciplined engineers by smart work.



The Department offers M.E. Communication Systems, M.E. Medical Electronics and Ph.D. in Information and Communication. The department has been accredited by the National Board of Accreditation (NBA), New Delhi. We are fortunate to be the center of choice for most of the stakeholders in this region.

The Department has well qualified, experienced and committed faculty members with vast research experience to impart quality education, develop professionalism and improve the skills of the students. The department has well equipped laboratories which include Electronics Lab, Integrated Circuits Lab, VLSI Lab, Microprocessor Lab, Embedded lab and PG Lab. The classrooms are equipped with ICT facilities to engage the students in an interactive way. The computer laboratories in the department are connected with 510Mbps Internet facilities. The students and faculty member are free to access the internet.

The department association ELECTROS is actively organizing special lectures, seminars, workshops, hands on training, symposia and conferences. Many of the students and faculty members are active members of professional bodies like ACM, IET, IEEE, ISTE and IETE. Students of our department actively participate in National Level Technical Symposia and Conferences conducted by other colleges and win prizes in various events. Third year students of our department Shali S.S., Priya R.P., Jofini J.P., Biju B have been awarded \$1,240.00 for the project Solar Animal Repellent - India - \$5277.5 project from EPICS in IEEE.

The students of our department are companies.





Electrical Engineers (SEE) in association with professional bodies like IEEE, IET, IEI, ISTE and Ensay Club. Many of our faculty members and students are active members of these professional bodies. Placement training and Internship programmes are also arranged through these Associations. To enhance the practical knowledge, students are accompanied by staff members to visit various industries.

The Department has collaboration with FOSSEE Project of IIT Bombay, through this project, our students are receiving honorarium along with internship Certificates. Our students will be given preference in internships and fellowships that are being offered (Direct or Remote) by IIT Bombay.

Electrical and Electronics Engineering



Dr. S.V. Kayalvizhi Head, Department of Electrical and Electronics Engineering

The department of Electrical and Electronics Engineering was established in the year 1998, and has been functioning effectively making admirable contribution towards teaching and learning. The department offers B.E. Program in Electrical and Electronics Engineering, M.E. program in Power Electronics and Drives and Ph.D. in Faculty of Electrical Engineering. The department has been accredited by the National Board of Accreditation (NBA), New Delhi.

The department has well qualified, experienced and dedicated faculty members including one Professor, three Associate Professors and twelve



Assistant Professors. The department has well equipped laboratories which include Electrical Machines Lab, Control and Instrumentation Lab, Power Electronics Lab, Electrical Workshop, Project Lab, Research Lab, Renewable Energy Lab and Simulation Lab. The classrooms are equipped with ICT facilities to engage the students in an interactive way. The department has its own library with around 1050 technical books/titles. The computer Laboratories in the department have been connected with 160 Mbps Internet facilities.

The students exhibit their co-curricular and extra-curricular skills through the activities of EEE student association of the department namely, Society of

Anna University Chennai has approved the department as Research Centre for pursuing Ph.D. Programmes. Faculty members of this department have published articles in reputed journals including IEEE transactions, Elsevier, Taylor and Francis and Springer. The publication areas include Renewable Energy, Power Electronics, Smart Sensors, Smart Grid, Power System and Electrical Drives. The faculty members of this department are guiding research scholars in the areas of Renewable Energy, Control & Instrumentation, Power Electronics, and Electrical Drives.The Department is practicing the state-of-art fields like Energy conservation and auditing, Energy efficient systems and Renewable energy systems.



Civil Engineering



Dr. I. Jessy Mol Head, Department of Civil Engineering



The Department of Civil Engineering was established in the year of 1999, one year after the inception of the College, in order to meet the growing needs of the construction industries and other fields pertaining to Civil Engineering. Intellectual, experienced and well qualified faculty members are the backbone of the department. Among them, 35% are Ph.D. holders and 43% are pursuing research under Anna University.

The department has been accredited by National Board of Accreditation (NBA) New Delhi (Tier II, 2021-2022 to 2023-2024).

The department has well equipped laboratories with modern instruments and advanced licensed software's including Primavera, MS-Project, Staad pro, E- tabs, ANSYS, Lab view and MATLAB to take up real time projects and research activities.

In order to enhance the research activities and students innovative projects, Structural Engineering laboratory was commissioned in the year 2016. The department has a PG program in Structural Engineering started in 2013 and Research Centre was established in the year 2017 Three scholars completed Ph.D through our research Centre. Presently, nine candidates are pursuing their Ph.D. in various fields including Aerated Concrete, Geopolymer Concrete, Light Weight Concrete and Seismic Analysis of Structures. A Consultancy Cell has been functioning well from the year of 2004 This consolidates the results of strength and serviceability of building materials submitted by industries and other institutions. Other services like drafting plans, elevation and design of structures, water quality testing and soil testing are been offered. A sum of Rs. 3,02,360 was generated last academic year.

REACH, a technical association of Civil Department, conducts ample of technical events and other curricular and co-curricular activities every year, to encourage students to portrait their talents and make them sublime and competent. A National level Civil Engineering Association, named FACEAT & P was inaugurated in 2019-2020 to strengthen the social commitment of students. Seeking excellence, our faculty members and students have published papers in many International Journals and Conferences. Three International Conferences have been conducted. Special coaching classes for GATE, UPSC and other competitive exam aspirants are provided. Our students are been placed in reputed core companies with maximum salary of upto 4 LPA and the percentage of placement was 74. The department faculty members constantly motivate the students towards achievements. In response, students perform with superiority, amassing laurels to the College. Our alumni have been recruited in Government and reputed private organization.

Information Technology



Dr. G. Sahaya Stalin Jose Head, Department of Information Technology

The Department of Information Technology was started in the year of 2001 with the intake of 60 students. The department has been accredited by the National Board of Accreditation (NBA), New Delhi [Tier II, 2021-2022 to 2023-2024].

The Department works with the objective of creating top-notch IT professionals to address the challenges faced by the industry and society. The department has laboratories furnished with systems of latest configurations to improve the analytical and practical skills of the students. The department has experienced and committed faculty members to impart quality education, project guidance, personality development and mentoring. The department ensures that students are up-to-date with the latest technologies through innovative teaching learning processes, MOOC

courses, enrichment and value added programs. Our students are consistently excelling in their placement process with the reputed companies. The department provides the platform for their overall development in sports, cultural, curricular, technical and regular academics.

The department technical association "BRIGITZ" regularly organizes technical gatherings and events like symposia, conference and faculty development programs, workshops, seminars, valueadded courses and enrichment programs. Recently, the department organized an international web conference on computing technologies (ICCT 2021). One of our student projects titled "Intelligent water quality detection tool" has been shortlisted for top 10 in student thesis competition organized by National Institute of Urban Affairs and was awarded Rs. 50000.

Regular industrial visits, internship programs and educational tours are arranged to enrich the students with practical exposure to the latest technical

expectations of the industry. Students are encouraged to undertake projects on latest research areas to meet the needs of industry.

Salient Features

- Strong legacy in 22 years of academic excellence.
- Experienced and Dedicated faculties with 5 Ph.D. holders and 5 pursuing Ph.D.
- Well-equipped air-conditioned laboratories with latest configuration.
- Spacious classrooms equipped with wall mounted LCD Projectors.
- Excellent amenities to take MOOC Courses like Coursera, NPTEL, etc.
- Personal mentoring for each student.
- Opportunities to join international professional bodies like IEEE, IET, ACM and CSI.
- Regular training and placement activities to improve the employability skills.



Mechanical Engineering



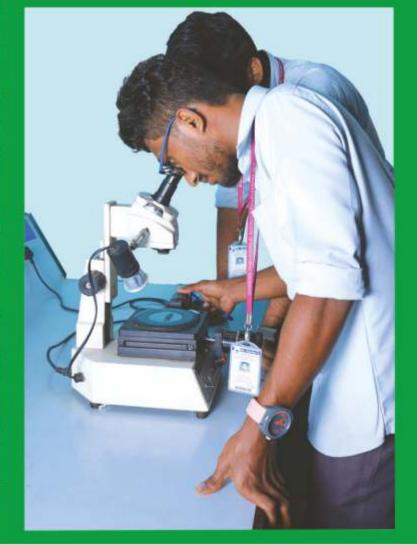
Dr. G. Antony Miraculas Head, Department of Mechanical Engineering



The B.E. degree program in Mechanical Engineering was established in the year 2003 and M.E. in Energy Engineering in 2011. The Department has been recognized as research centre by Anna University. Seventeen research scholars from this department have been awarded with doctoral degree and currently 44 scholars are on research works pursuing Ph.D. degree. The department is accredited with NBA for its UG Program. Our faculty members including ten members with doctoral degree from prestigious universities are intensively involved in research to gain and provide conceptual understanding with the empirical back up.

In order to make our students industry-ready, cutting edge technologies are imparted through special workshops for personality development and software skills such as SOLIDWORKS, TURBO C++, ANSYS, MATLAB, EdgeCAM, LABVIEW and AutoCAD.

The technical association of the department, MEGX is incessantly organizing special lecturers, seminars, workshops, conferences, etc., to keep in track with the up-and-coming trends. The other professional bodies such as Society of Automotive Engineers (SAE India) and Indian Society of Heating Refrigerating and Air-Conditioning Engineers (ISHRAE) provide excellent opportunities for the students to interact with professionals and industry leaders for innovative research. The traditional human values are inculcated into the students through their active participation in community developed programs organized through association.



Artificial Intelligence and Data Science

Humanities and Sciences

Dr. D. Judson Coordinator, Humanities and Sciences











Dr. R. Jemila Rose Head, Department of Artificial elligence and Data Science

The Department of Artificial Intelligence and Data Science has been established in the academic year 2022-2023 with an intake of 60 students. It is a four year full time undergraduate program recognized by the All India Council for Technical Education (AICTE) and affiliated to Anna University. This is a new, exponentially growing field of science, engineering, and technology, as well as perceptive visionary development in academics and research. It offers the best technical values among students for their advancements in career and to face the challenges and competitive real world



outside. Our faculty provides the best learning content through high configuration computing systems which will magnify students critical thinking and support Outcome Based Education through MOOCs platform. We prepare and practice data professionals with the skills to build intelligent machines, analytics and visualization The Department of Humanities and Sciences functions with eminent faculty members playing a vital role in mending and moulding the young minds towards the path of success. English, Mathematics, Physics and Chemistry are the four main streams of this department. H&Sc aims to bring out excellence among students in the respective disciplines by providing them a deeper and thoroughbred knowledge about the basic facts and fundamentals among the various streams of Engineering. The department offers excellent academic environment with a team of highly qualified faculty members to satisfy the needs of the students and to inspire them to develop their technical skills. The laboratories of Physics and

Chemistry are well equipped with modern facilities to develop the practical knowledge and technical skills of the budding engineers. The Physics Research Centre is established for the faculty members to extend their research work. The Department of Mathematics is equipped with highly qualified faculty members who assist the students to tackle engineering problems with ease. The Department of English acts as a beaconing light and emphasizes on effective communication which is essential to sustain in this competitive world.

The Department has rich curricular and allied activities to provide comprehensive education for B.E and B.Tech students. Special attention is given to students through orientation programmes, induction training, entry level tests, language training programmes, motivational programmes, and industrial visits.

Curiosity-driven research remains our main strength, while many of our research groups are actively involved in solving problems that have direct and immediate relevance to industry and society.

Our research interests span all areas of chemical sciences, with strong overlap with related disciplines of materials science, environmental science and applied science. Our department is well equipped to perform cutting edge research, not only by virtue of central instrumental facilities of our institute and department but also because of facilities built by individual faculty members.

Management Studies



Mrs. Punitha Sahaya Mary Francis Head, Department of Management Studies



Since inception in 2007, the Department of Management Studies has been imparting quality management education to students through experienced and expert faculty members. The department offers various specializations like Marketing, Finance, HR, Operations Management and Systems.

Personality Development Programs are conducted for students to enhance their managerial skills, capabilities, knowledge and team work. The department has been striving for excellence in academics, research and cultural activities besides imparting moral and human values to the students for their all-round development.

The education and exposure that the students gain during two years of their course renders them confident to join the world of business and face the challenges of the corporate environment.



Computer Applications



Dr. M.M. Janeela Theresa Head, Department of Master of Computer Applications

Computer science education opens multiple opportunities for its graduates across many diverse areas. The department of Computer Applications was established in the year 2009 with the aim to offer a degree (MCA) that is specifically designed to address the challenges of the present and future workplace. The department has a set of well experienced, highly qualified, and dedicated staff members who are oriented towards research. The department has good infrastructural facilities and is equipped with full-fledged laboratories. The department is recognized as research centre by Anna University, Chennai and it is functioning effectively with four research supervisors.

In order to enhance the students' computing, analytical and problem solving skills, every student is provided with an individual system during lab hours and also with any-time access to internet. The department has an association named as "Xavier's Association of Computer Applications (XACA)" to develop and showcase inbuilt talents of each and every student in curricular and co-curricular activities. The association organizes conferences, symposia, workshops and seminars to improve students' knowledge on industry requirements. The department also signed MoUs with industry people to train our students highly competitive in the job market. We encourage students to undertake online courses, internships and real-time projects.

Our students have participated in various intercollegiate competitions, National level paper presentations and have won prizes. So far, our students have scored 18 ranks under Anna University, Chennai and have been placed in several multinational companies like Infosys, TCS, HCL, Wipro, UST Global Technologies, etc. The human society has been witnessing revolutionary changes of computerization in the field of science and technology. Hence, we equip our students with in-demand computing skills so that they can be masters in the respective area of interest.

Centre for Research and Development



Dr. M. Marsaline Beno

St. Xavier's Catholic College of Engineering (SXCCE) is committed to promote Research & Development (R&D) in the fields of Science, Engineering and Technology and aspires to be a centre of excellence for R&D and Technology transfer. The institution encourages the faculty and others conducting quality research through analysis and synthesis of current research technologies and develop new or improved processes and products for the benefit of the society. For the purpose of coordinating and encouraging research Centre For Research and Development (CFRD) has been established. By way of giving quality research laboratories and equipment, arranging for MoUs with eminent universities and institutions foreign and inland, providing incentives for researches and publications, it encourages the faculty and students. The management of SXCCE has also shown great interest in investing for researches in key futuristic research areas namely, Artificial Intelligence, Cloud Computing, Robotics, Healthcare Applications, Climate Change and Pollution Control, Renewable Energy, Image and Signal Processing, Intelligent Transportation and Emergency Response System, Smart Devices, Smart Structures, Smart Agriculture, Composite and Nano Materials, Biofuels, ICT enabled services etc. for building a technically empowered humane society.



Seven departments of our institute are recogonized as research centres by Anna University, Chennai. The institution has more than 80 faculty members holding Doctoral degree and 34 are recognized research supervisors in various faculties of Anna University, Chennai. There are 128 research scholars currently pursuing their Ph.D. degree through full-time and part-time basis. There are 90 research scholars awarded with Ph.D. by Anna University through our research centres.

The research infrastructure in computational science includes a high end server configured with cloud computing private infrastructure with HP Proliant DL385 G7 server as cloud controller configured using Opennebula connected with more than 1000 high end Computers operating with Microsoft Windows and Linux-Ubuntu. All the research depart-ments possess latest equipment to carry out research in the topics of current areas of engineering and technology.

Various agencies have provided minor and major project funds to individuals, to departments and to the college as whole to enhance or install new infrastructural facilities. Research experts in our college extend consultancy services to various organizations. Our management liberally provides financial support to the students to file patents and to participate in project presentations under the schemes of AICTE, MHRD and other Government Organizations.

In addition to the above facilities, the students and researchers are provided with online access to the journals published by the standard and renowned publishers such as IEEE, ACM, Elsevier, Springer, Wiley, Taylor & Francis, etc. Intranet access for online journals is made available to the students who are willing to carry out research based projects inside the campus. Further, students and scholars are authorized to access more than 1000 online research journals in order to acquire knowledge in various fields of engineering and technology that will make them survive in this competitive world confidently.

Our institution research publications h-index is 33 with more than 4465 citations, 75 patents are published and 2 patents are granted by our faculty members and students.

Department of Science and Technology, INDIA has sanctioned an amount of Rs.18 Lakhs for a project proposal named "Audio Electronics System for Matured Coconut Identification" AICTE has sanctioned an amount of Rs. 10 lakhs for a project proposal named "Internet of Things in Smart Technologies for Sustainable Agriculture Development and Disaster Management". under Research Promotion Scheme (RPS). Ministry of Electronics & Information Technology R & D in Electronics Group (Microelectronics Development Division) has sanctioned an amount of Rs. 38 Lakhs for a project proposal named "VLSI implementation of CNN Archi-tectures for Real Time Applications".

Dr. Ambedkar Central Library





Online Access Service

The library has online access to the journals published by IEEE, (www.ieeexplore.ieee.org), Elsevier (www.sciencedirect.com), Springer link (www.springerlink.com), N-LIST: (National Library and Information Services), (nlist.inflibnet.ac.in), National Digital Library of India (ndl.iitkgp.ac.in) and NPTEL video (http://192.168.0.1/ digitallibrary). IP based intranet access for online journals is provided within the campus and Central library has an access to 664 journals.



Dr. M. Vijaya Kumar

The Dr. Ambedkar Central Library of the college has kept pace with emerging challenges, being one of the best technical libraries in the region. The state of the art library stretches over 18,000 square meters; the library has in its collection more than 32,000 volumes with 9140 titles on Engineering, Management and Humanities and subscribes to 110 technical journals, 664 online journals and 4 online databases. It has the capacity to accommodate 200 students at a time. Documents in the Library are classified under Dewey Decimal Classification (DDC) system. It has membership of DELNET Consortium, and it is enabled with Wi-Fi technology and security systems with Closed Circuit Television System (CCTV).

Online Public Access Catalogue (OPAC)

The entire Library collection can be searched through the web enabled Online Public Access Catalogue (OPAC). Search for catalogue of books, by Author, Title, Link to OPAC is given in the intranet of the Institute which is accessible throughout the campus.

Hiltek: A Start up on Robotics

As the world is in the Fourth Industrial Revolutions mainly ushered in by the technologies of automation and Robotics, to augment our students and other young- sters in contemporary technologies, St. Xavier's Catholic College of Engineering launched Hiltek Robotics Research Center Pvt. Ltd. in 2017, a training, research and production company, true to the Entrepr-eneurship zeitgeist.

Situated within our campus, Hiltek gives every one of our students opportunity to make her/his innovative ideas and dreams a reality. With standard special syllabi and strict practical training schedules, students undergo four levels of training and receive a valid diploma. We have a well-equipped robotics lab and incubation set up wherein our students shape their future and invent new products for the society by way

of doing projects and readying themselves well for placement. Nearly 2000 students have benefited by our training programs. "HillRo2019" a specialized expo was organized in which more than 500 students participated with their innovations.

One of our ventures is to train the school children in Robotics. At present 1100 students from 19 schools are being trained. A district level competition in Robotics "Innnoventz 2019" was a big success with the participation of more than 300 students in 67 groups with their innovative products. The state level summer camps and other motivational programs we organize for the school students are inspiring the students to delve deep into the new technologies and create useful produces for a better future for themselves and the society.





Our Campus consists of more than 1000 high end Computers operating with Microsoft Windows and Linux. All the computers are networked with high-speed (100/1000 Mbps) Ethernet/OFC/Wi-Fi connectivity. To enhance the e-Learning facility all the computers are connected to the internet with an 510 Mbps 1:1 dedicated Direct Internet Access. Sophos XG Firewall provides protection for our network, users and applications.

Dedicated Servers are available to maintain the College Automation System, Students Academic Activities, Human Resource management, Web and email Services.

A Cloud Computing infrastructure with HP Proliant DL385 G7 server as cloud controller configured using opennebula is available for research purposes. Authenticated users can avail this facility anytime anywhere.



MoU with Foreign Universities











Infrastructural Facilities





ROCK MENS HOSTEL









It's not at all exaggerated when it's avowed that SXCCE offers extraordinary infrastructural facilities and institutional care for imparting and acquiring education. The college management never compromises on the safety and the standard of our infrastructures. Public address systems with modern e-devices have been fixed wherever required. That's why our college premises are regularly used by the government and the corporate departments for the conduct of their programmes including competitive exams and professional trainings. To list out a few notable facilities:

- Auditorium with a capacity of 2300, with AV facility
- Rock Auditorium with a capacity of 450, AC and AV facility
- Seminar Hall in Nikola Tesla Block with a capacity of 150, AC and AV facility
- Conference hall Bishop Leon Merwrial Block with a capacity of 800, AC and AV facility
- Seminar hall in Albert Einstein Block with a capacity of 250, AC and AV Facility
- AV hall in library with a capacity of 50
- Gymnasium
- Indoor courts for badminton and table tennis
- Standardised basketball court
- Football and cricket fields
- Separate Hostels for boys and girls with wi-fi facility
- Cafeteria
- Extensive transport service
- Stationery store
- Dispensary
- Driving school

Other facilities include banking, book shops, solid waste management, waste water management and water harvesting.



Internal Quality Assurance Cell (IQAC)

(IQAC) was established on 29th August 2017, SXCCE was accredited with grade 2016, to develop quality systems towards "A" by NAAC. On 19-03-2019, UG programs improving the academic and administrative performance of the college. IQAC in SXCCE has been constituted under the patronage of the Correspondent, chairmanship of the Principal and coordination of a senior Faculty. Other members of IQAC include administrative officer, faculty members, member from management, members from local society and industrialist.

IQAC co-ordinates the accreditation process of National Assessment and Accreditation Council (NAAC) & National

The Internal Quality Assurance Cell Board of Accreditation (NBA). On 12-09-EEE, ECE and MECH were accredited by NBA under Tier-II category with a validity period from 2018-2019 to 2020-2021 and was further extended to one year 2020-2021 to 2021-2022. Based on the





Dr. J. Annrose Coordinator-IQAC

compliance inspection held on 13-08-2022 further it was extended to three years with a validity period from 2022-23 to 2024-25

On 29.06.2021, UG programs CE, CSE and IT were accredited by NBA under Tier-II category with a validity period from 2021-2022 to 2023-2024.



St. Xavier's Sports Council

Sports and games activities and achievements are the hallmarks of SXCCE. We build a vibrant and integrated sports community to augment the physical and mental strengths of the students. We do bring up talented sports men and women through the highest standard of sports coaching enabling them to participate in university and national level sports events and tournaments.

St. Xavier's Sports Council ensures that every student maximizes his/ her sporting potential and finds a sport that he/she can enjoy and participate in with confidence and success. Our motto is to



Mr. M. Thomas Mathiyas Physical Director

promote true sportsmanship and fundamental values through sports and games. Our college Physical Director is a regular selection committee member for Anna University kabaddi, badminton, and football teams and he has been honoured with the best Anna University Sports Board Coordinator Award, Ours is the coordinating centre for Anna University zone-19 sports and games.





Co-Curricular Cells & Clubs





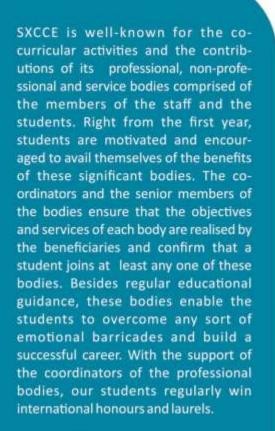




























- IEEE Education Society
- CETA
- Robotics Club
- IEEE Student Branch
- IEEE-WIE
- IET
- ISTE
- SAE
- CSI
- ISHRAE

- ACM
- Research Committee
- Institute Industry Collaboration Cell
- ACE
- ELECTROS
- SEE
- REACH
- BRIGITZ
- MEGX
- SHAX

- XMA
- XACA
- Tamil Indigenous Mathematics and Engineering Research
- International Research Collaboration Cell
- Teaching Development Cell
- FACEAT&P
- Math Club
- IETE Student Forum (ISF)

Non-professional Cells

- Youth Red Cross
- Sports Council
- NCC
- Eco Club
- Entrepreneurship Development Cell
- · Literature and Orator Club
- Tamil Mantram
- Jyothis
- · Training and Placement Cell
- Ensav

- Women's Cell
- NSS
- · St. Xavier's Choir
- Radio Club
- Konverz
- Photography Club
- Outreach Progamme Committee
- Dramatic Club
- Musical Club
- Drone Club

Service Bodies

- Internal Quality Assurance Cell
- SC/ST Welfare Cell
- Health Care Cell
- Software Cell
- Anti-Ragging Cell
- Parent Teachers Interaction Cell
- Library Advisory Board
- Counseling Cell
- Grievance Cell Student Welfare Cell
- Alumni Association Chronicle Cell
- Readers Club
- Constitution Club

Training & Placement Cell

"Genuine Companies, Big Salaries, Great Career"





Mr. M. Anto Xavier Roche Dean - Student Futuristic Services

The Training and Placement Cell of SXCCE is functioning with a mission of preparing and equipping our students to meet industry expectations in career building, thereby placing them in reputed companies across the country. The cell concentrates on molding the minds of our students to face the competitive world with confidence and courage.

TRAINING

The Training and Placement Cell organises regular internal and external trainings with the objective that the students get ready for the new-fangled

opportunities in the job market. Placement training is provided four hours per week along with the curriculum right from 3[™] semester onwards. First Year communication skills subjects are completely based on ESOL-LSRW pattern. It has seven fulltime internal trainers (2-Communication skills trainers, 4-Coding trainers & 1-Quants trainer) to train the students in the following areas.

- Communication Skills
- Soft Skills
- · Coding/Programming Skills
- · Quantitative Aptitude & Logical Reasoning
- Group Discussion
- Interview Skills
- · Resume Writing.

PLACEMENTS

Besides upholding amiable relationship with the industries, the Training and Placement Cell invites them for on campus recruitment drives and supports our students to get recruited in multi-national companies.

Currently SXCCE enjoys the credit of being the nodal centre for "Naan Mudalvan" state-wide placement program, an initiative by Tamil NADU Government. Also, SXCCE is the nodal centre of "Centre for University-Industry Collaboration (CUIC)", Anna University to conduct flagship Tamil Nadu State Level Placement Programme (TNSLPP) campus drives.

The MNCs in IT sector like Cognizant, Hexaware Technologies, Infosys, HCL Technologies, Atos-, Tech Mahindra, ZOHO, Centizen, Soft Square, SMI, H&R Block, PIT Solutions and the major core companies including Data Patterns, Jasmine InfoTech, JSE Engineering, Schneider Electric, TVS Sundaram Clayton, Pinnacle Info solutions (MEP Company) visit SXCCE for on campus placement drives regularly. 400 plus placement offers have been provided in the last two consecutive academic years.

INFRASTUCTURE

The Training and Placement Cell is functioning at Bishop Leon Memorial Block, expanded with state-of-the-art conference hall, placement office, two group discussion halls and 8 interview panel rooms. It is also equipped with "Communication skills training center", which provides comprehensive training in Listening, Speaking, Reading and Writing Skills.

Our Major On - Campus Recruiters



























Alumni Testimonials

Priyadharshini K. (2014-2018 Batch)

Software Developer, H&R Block, Technopark, Trivandrum



The best place for the overall growth in career, professional, physical and psychological development. Very good infrastructure, best campus placement and a great culture to learn, grow and shine. Best in Kanyakumari District!

Ayyanesh S.S.

(2003 - 2007 Batch) Development Engineer (Philips Hue), Eindhoven, The Netherlands



SXCCE boosts the confidence in every budding engineer that enables him/her to achieve greater heights. The college facilitates different platforms to build the technical, leadership and people skills in every engineer. A very strong represent-ation of IEEE is a very good example. In addition to providing theoretical and practical knowledge, the college culture always encourages the engineers to take the additional step towards their vision and fulfilling their dreams.

Sundaram K.

(2012-2016 Batch) Specialist Programmer, Infosys, Trivandrum



HODs, Professors and the faculty members are very good. The way of teaching, and the care for the students are good. Industrial visits, Tours are just great. I would say this college will give you plenty of opportunities to get you a job and I got placed in 4 reputed companies. So if you want to study Engineering in Kanyakumari, SXCCE is the best option I can give you. Cheers!!!

Vishnu P.R. (2011-2015 Batch) Tech Analyst, Accenture, Chennai



SXCCE helped me to develop my personal abilities and professional skills. There are several technical associations like IEEE Student Branch, IET chapters. ACM etc. There are facilities available to

access IEEE digital library that helped us not only to complete our projects and but also to learn and understand a lot about technology and innovations happening across the globe. I received an IEEE scholarship and a chance to attend IEEE congress in Srilanka, I was an NCC cadet during my college days and it helped me in a lot of ways to develop my leadership skills. A wonderful ambience, good staff-members, a lot of resources and most importantly, the freedom to explore every opportunity made me always feel this college one of the best places for learning.

John Winsly (2003-2007 Batch)

Managing Director, Fluid Power Engineering Services, Nanguneri.



Doing my course in the Mechanical Engineering department of SXCCE deepened my engineering studies with an excellent experience. The knowledge and the entrepreneur skills, which I acquired through the Entrepreneur Development Cell during my studies, motivated me to start my own company, namely, Fluid Power Engineering Services at Nanguneri, Tamil Nadu. I appreciate the management and the faculty members for offering excellent infrastructure and learning facilities that helped me to build a successful career.

Dr. Leon Raj J. (2006-2010 Batch)

Scientist, CSIR, North East Institute of Science and Technology, Jorhat, Assam



My journey in SXCCE has been absolutely amazing. The college regularly organizes workshops, student exhibition, industrial visit, experts talk and motivational classes to help students to learn new skills. In addition, other important student bodies are NCC, NSS, YRC and fine arts club which embrace student talents. The support I received from the college allowed me to explore various field, and then it helped to choose the field I liked.

SXCCE- An Autonomous Institution

It is a pride moment that St. Xavier's Catholic College of Engineering, Nagercoil is awarded with Fresh Autonomous status by UGC, New Delhi and Anna University, Chennai for a period of 10 years w.e.f 2022-'23. By becoming an Autonomous Institution, we desire

- a) To import latest cutting edge Technologies to the students
- b) To prepare the students Industry ready by providing relevant certificate courses and value added courses.
- c) To train the students to find the solutions of local needs.

Considering the above objectives, we are designing the curriculum and syllabi with the guidance of Subject Experts, Industrialists and

meritorious Alumni. For smooth running of Autonomous system, we have statutory committees like Governing Body, Finance Committee, Academic Council and Board of studies in all Faculty containing Experts. With the support and co-operation of the stakeholders we are marching ahead successfully under Autonomous stream.



St. Xavier's - Incubation Centre (SXCCE - IC)

St.Xavier's-Incubation and Innovation Centre is setup to promote innovation and entrepreneurship by converting and translating technology/business ideas and innovations in various disciplines of science and engineering into products, processes and services for commercial and for the benefit of the society to accomplish its goal. It facilitates incubation of new enterprises with innovative technologies by admitting them in SXCCE - IC and providing them physical, technical and networking supports and services. At present, FLUTTERFROG Software Solutions LLP, an incubatee of SXCCE-IC is developing its products with the aim to start its own operations as a start-up company by Nov 2024.



SXCCE - MSME Business incubation Center / Host Institution

SXCCE was approved by MSME as the Technology Business incubation Center (BIC) / Host Institutions (HI) in the year, 2022. The advantage of the prospective entrepreneurs to join the SXCCE-IC is that all the MSME schemes, promotional activities and professional networks will be passed on to the budding entrepreneurs directly.



SXCCE - Institution Innovation Council (SXCCE - IIC)

It's our proud privilege to proclaim that St Xavier's Catholic College of Engineering has joined hands with Ministry of Education (MoE) to foster the culture of Entrepreneurship and innovation in the institute. SXCCE - IIC is promoting innovation in the Institution through multitudinous modes leading to an innovation promotion eco-system in the campuses. For the last two academic consecutive years, SXCCE-IIC has achieved 3.5 star rating.



- The only engineering college in Kanyakumari District accredited with 'A' Grade by National Assessment and Accreditation Council (NAAC) and accredited by National Board of Accreditation (NBA) for six UG programs.
- The only engineering college in Kanyakumari District functioning with more than 80 professors holding doctorate degree and wide experience
- The college enjoys the unique reputation for improving the placement skills of the students and ranks first in the district for getting them placed in multinational companies and high - level industries.
- The only engineering college in the district with a spaciously built library that contains more than 32,000 engineering books and National and International e-journals, offering excellent service facilites.
- Besides high speed Internet connection (510 Mbps), more than 1000 computers in the college are equipped with digital library.
- The college has specially designed laboratories with suitable and quality instruments and machinery apt for high level researches and training.
- The only college in the district with computer labs consisting of more

- than 1000 computers equipped with technical software programmes like LABVIEW, Solid Works, ANSYS, SAP-BI, MATLAB, Rational Suit, and Oracle.
- Classrooms are not only spacious and airy but also fixed with modern teaching aids like Digital Projector.
- The College has the distinction of regularly enjoying the prime position in the district for producing and getting the highest number of rank holders in the university examinations.
- Department of Sports and Games is an admirable part of the college with multipurpose indoor and outdoor stadiums and gym facility. It trains the students to win medals in the university level tournaments.
- The students are gifted with a chance to learn motor vehicle driving as there is

- a Registered Driving School functioning in the college.
- The College has an establishment called HILTEK Robotics Research Centre Pvt.Ltd., where the robotic technology-related trainings are conducted to enable the students to create various automatic machines.
- Every year the college management offers scholarship to the tune of Rs. 1,00,00,000/ - to the poor and the meritorious students.
- Higher education and employment opportunities- related training classes like GATE, IAS, and IPS are regularly conducted.
- The College has Students Health Benefit Scheme to help the students who have suffered unexpected losses due to accidents or death of parents.

The college is located in a serene and eco-friendly environment at the foot of Ponmalai Hills in Chunkankadai, Nagercoil. It is about 26 km from Kanyakumari, the southern tip of India, 6 km from Nagercoil, the nearest railway station, 65 km from Trivandrum, the nearest airport.



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