



**ST JOSEPH
ENGINEERING COLLEGE
MANGALURU**

AN AUTONOMOUS INSTITUTION

PROSPECTUS 2021-22



Adeline Rose Pinto

Student - II Year CSE

Career Goal:

HR Manager at Goldman Sachs /
Professional Anchor in World Television



ST JOSEPH ENGINEERING COLLEGE

St Joseph Engineering College (SJEC) - Mangaluru, a premier educational institution and a hub for Creativity and Innovations in Engineering, was established in the year 2002 with an aim to educate the youth in Engineering & Technology. SJEC is an Autonomous Institution affiliated to Visvesvaraya Technological University, Belagavi, in the Karnataka State and recognized by All India Council for Technical Education (AICTE), New Delhi.

SJEC is professionally managed and forms a part of over 250 educational institutions of the Diocese of Mangalore. The Institution has recently secured the NAAC Accreditation with A+ Grade. Four programmes (CSE, ME, ECE, EEE) offered by Institution have also been accredited by NBA, New Delhi for three Consecutive cycles from 2013 to 2022.

SJEC is located in an idyllic place at Vamanjoor, just 10 km away from Mangaluru city.

MOTTO OF THE COLLEGE

SERVICE & EXCELLENCE

VISION

To be a global premier Institution of professional education and research.

MISSION

Provide opportunities to deserving students of all communities, the Christian students in particular for quality professional education.

Design and deliver curricula to meet the national and global changing needs through student-centric learning methodologies.

Attract, nurture and retain the best faculty and technical manpower.

Consolidate the state-of-the-art infrastructure and equipment for teaching and research activities.

Promote all round personality development of the students through interaction with alumni, academia and industry.

Strengthen the Educational Social Responsibilities (ESR) of the institution.

SJEC goes AUTONOMOUS!



St Joseph Engineering College has been granted Autonomous Status by the UGC from the academic year 2021-22.

Benefits of Autonomy:

An autonomous Institute will have the freedom to:

- i) Determine and prescribe its own courses of study and syllabi, and restructure and redesign the courses to suit local needs. This will cover all courses at UG, PG, etc. at the time of conferment and new courses subsequently.
- ii) Offer student-centric courses, with a wide range of electives and the freedom to choose desired courses.
- iii) Periodical changes in syllabus as per changing needs.
- iv) Prescribe rules for admission in consonance with the reservation policy of the state government.
- v) Evolve methods of assessment of students' performance, the conduct of examinations and notification of results.
- vi) Use modern tools of educational technology to achieve higher standards and greater creativity, i.e. to frame their curricula, devise methods of teaching, examination and evaluation.
- vii) Promote healthy practices such as community service, extension activities, projects for the benefit of the society at large, neighbourhood programmes, etc.

Benefits for Students:

- i) An Autonomous Institute will be able to offer more updated courses relevant to the local needs, in contrast to the University offered courses that mostly serve the general purpose. The market-oriented curricula to be offered by an Autonomous Institute will attract the students better job prospects.
- ii) University curricula have a fixed structure with little scope for variation, whereas an Autonomous Institute will be able to offer a flexible curricula structure which will give the students opportunities to complete the courses as per their convenience.
- iii) Autonomous Institute will have the authority to formulate curricula for indepth teaching which will equip the students with the required skills. Students at an autonomous Institute will be at an advantage in the job market vis-à-vis a student at other affiliated Institutes.
- iv) An Autonomous Institute will be able to introduce more objective & continuous assessment system to help the students to become aware of their short comings, as well as required space to improve through a continuing process.

VISIONARY LEADERSHIP



Most Rev. Dr Peter Paul Saldanha
President
Bishop of Mangalore



Right Rev. Msgr Maxim Lawrence Noronha
Vice President
Vicar General, Diocese of Mangalore



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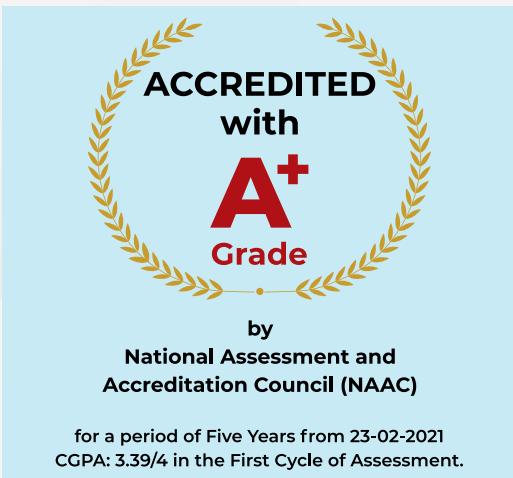
QUALITY ASSURANCE FOR EDUCATION

SJEC has established an Internal Quality Assurance Cell (IQAC) to enhance and sustain the quality of teaching-learning process. The IQAC conducts Faculty Development Programs (FDPs) related to quality assurance, accreditation, and OBE (Outcome Based Education) under various themes such as:

- 'Integra' (FDPs aimed at promoting OBE and Accreditation objectives)
- 'Spandana' (FDPs aimed at the development of Technical Staff of SJEC)
- 'Spoorthi' (FDPs with focus on Motivational and Inspirational aspects)
- 'Cornea' (FDPs with an emphasis on building the skill level of faculty) to ensure continual quality improvement in the system.

Each Department has Program coordinator/s, Module Coordinators, Program Assessment Committee (PAC), and Department Advisory Board (DAB) to ensure continuous quality improvement at departmental level whereas, IQAC drives the quality mechanism at Institute level.

The college has ensured the life-long learning of faculty members through the Performance Based Appraisal System (PBAS). Every faculty member



every semester need to undergo professional courses through online platforms such as NPTEL, Coursera, Edx. To enable the same college has become NPTEL nodal centre and subscribed to other learning platforms. Besides, the college promotes faculty members to undergo courses through some professional partners such as IUCEE (Indo Universal Collaboration for Engineering Education).

Owing to the OBE practised at the college, SJEC has already been accredited by the National Board of Accreditation (NBA) for four of its B.E. Programs for three consecutive cycles. The current cycle of accreditation is valid up to June 2022. Also, SJEC has been awarded the prestigious A+ grade by the National Assessment and Accreditation Council (NAAC) for five years (valid up to February 2026). With a Cumulative Grade Point Average (CGPA) of 3.39 on a 4-point scale, SJEC has joined the elite list of colleges accredited with an A+ grade by NAAC in its first cycle.



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PROGRAMMES OFFERED

► B.E. DEGREE PROGRAMMES

Four-Year Degree Programmes

Autonomous under VTU-Belagavi

- Computer Science & Engineering
- Computer Science & Business Systems
- Artificial Intelligence & Machine Learning
- Mechanical Engineering
- Electronics & Communication Engineering
- Electrical & Electronics Engineering
- Civil Engineering

ELIGIBILITY :

Admission to First Semester B.E.:

The candidates should have passed second year Pre-University or XII standard or equivalent examinations with minimum 45% (40% for SC/ST and OBC Karnataka candidates) marks in Physics and Mathematics along with one of the following subjects: Chemistry, Bio Technology, Computer

Science, Biology, and Electronics. Candidates must have studied English as one of the subject in PUC. CET score card is made mandatory for the students taking admission in B.E. programmes. A few seats are reserved under NRI quota.

Admission to Third Semester B.E. (Lateral Entry):

A candidate who has passed diploma examination or equivalent examination and obtained an aggregate minimum of 45% marks taken together in all the subjects of the final year (fifth and sixth sem) diploma Examination is eligible for the admission to II year B.E. programmes. The eligibility is 40% in the case of SC / ST and OBC Karnataka candidates.

B.E. Honours Degree:

University offers Honours Degree for students aquiring additional 18 or more credits through Massive Open Online Courses (MOOCs).

► POST GRADUATE DEGREE PROGRAMMES

- **MBA Degree**

- Finance
- Human Resource
- Marketing (Dual Specialisation)
- Innovation, Entrepreneurship & Venture Development
- Two-Year Management Degree
- Affiliated to VTU-Belagavi

Eligibility: Graduate in any discipline with an aggregate of 50% marks (45% for SC / ST & Cat-1) is eligible.

Government Quota: Candidates should appear for PGCET and the seats are filled through centralized counseling.

Management Quota: Seats are based on the percentage scored in the graduation course and the percentile obtained in the KMAT /CMAT entrance test.

- **MCA Degree**

- Two-Year PG Degree in Computer Applications
- Affiliated to VTU-Belagavi

Eligibility: Passed BCA / Bachelor Degree in Computer Science and Engineering or equivalent Degree.

OR

Passed BSc / BCom/ B.A. with Mathematics at 10+2 Level or at Graduation Level (with additional bridge Courses as per the norms of the concerned University). Obtained at least 50% marks (45% marks in case of candidates belonging to reserved category) in the qualifying Examination.

► PhD PROGRAMMES

- Physics
- Chemistry
- Mathematics

Eligibility: MSc Degree with minimum 60% marks in related discipline.

- Mechanical Engineering
- Computer Science & Engineering
- Electrical & Electronics Engineering
- Civil Engineering
- Electronics & Communication Engineering

Eligibility: MTech in related discipline.

- Management

Eligibility: MBA degree with a minimum CGPA of 6.75 out of 10 or 60% aggregate marks.

The above PhD programmes are offered by the respective Research Centres recognized by VTU Belagavi.



DEPARTMENT OF COMPUTER SCIENCE AND ENGINEERING



The Department of Computer Science and Engineering was setup during the inception of the college in 2002. The primary objective of this program is to prepare students for successful careers in Computer and Information technology industry that meet the needs of Indian and multinational organizations.

The program involves wide variety of courses which enable the students to formulate, solve and analyze computer engineering problems, prepare them for graduate studies and develop the ability to synthesize data and technical concepts for application design & implementation of real time software products. The faculty of the Department are actively involved in teaching and research with specializations in Cloud Computing, Image Processing, Process Mining, Natural Language Processing and Soft & Evolutionary Computing. The Department was provisionally accredited by NBA for 2 years from June 2013 to May 2015 and is reaccredited by NBA under OBE for six years from July 2016 to June 2022.

► Programmes offered

BE – Computer Science and Engineering with 180 intake

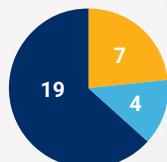
BE – Computer Science & Business Systems with 60 intake

PhD

The Department has entered into MOUs with

- VMWare
- Blue Prism - Robotics & Process Automation (RPA)
- Infosys Campus Connect
- CISCO Networking Academy – NetCad
- Kakunje Software Pvt Ltd (KSPL)
- Ardelis Technologies

► Faculty Strength



- PhD
- Pursuing PhD
- MTech / ME /MSc

► Best Practices in the Department

- Monitoring the attendance and Performance of students
- Remedial classes for slow learners
- Workshops and Seminars as part of continuous learning for staff and students
- Peer-to-Peer learning
- Alumni interaction with students

► Technical Clubs



Delta DevOps CSI – SJEC



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Professor & Head

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BE in COMPUTER SCIENCE & BUSINESS SYSTEMS (CSBS)

SJEC takes pride to launch in partnership with India's leading IT Service and Consulting Company – TCS, an industry ready B.Tech Programme titled Computer Science and Business Systems (CSBS) to cater to the rising need of engineering talent with skills in Business Systems. This is a Four-Year undergraduate degree programme. This state-of-the-art programme aims to impart knowledge of cutting-edge technologies and business skills with hands-on exposure to help the students be industry-ready.

This programme aims is to expose students not only the core topics of Computer Science but they also develop an equal understanding of humanities, human values and management sciences. This programme is an apt choice for students aspiring to be business leads in the IT industry. Students will also gain excellent industrial exposure on emerging topics such as Analytics, Machine Learning, Cloud Computing, Internet of Things etc. For more details on the programme, please explore: <https://info.tcs.com/computer-science-business-systems.html>

Program Duration

Four Years Full-Time B.Tech. in Computer Science and Business Systems in collaboration with TCS.

Key Objectives:

- Learning Common Business Principles along with Computer Science
- Exploring Business Discipline and Service Orientation
- Innovative Ability
- Strong Human Ethics and Values
- Understanding Technology Abstraction
- Active mentoring by Experts from TCS
- A multi-disciplinary course with high credibility
- Understanding of Contemporary Technology

Newly Launched for the Academic year 2021-22



Highlights

- The curriculum is designed by faculty members closely working with eminent professionals from TCS and Academia and is approved by AICTE
- The syllabus is prepared based more on skills than theory which most of the big MNCs require. So that skillful engineer will be produced which will make them to stand out from the crowd.
- Business-related topics like humanities, management science was added which would help students to enhance their skills in multiple fields.
- Industrial Training & live projects supported by TCS
- Students who complete the course successfully will be preferred for recruitment by TCS.

SJEC CSBS Benefits

- Offer students an opportunity to learn Computer Science with a blend of Business Studies.
- Novel and unique academic programme in the region and offered under the autonomous platform.
- The expertise of the faculty in CSE and MBA will be utilized for all interdisciplinary subjects.



DEPARTMENT OF ARTIFICIAL INTELLIGENCE & MACHINE LEARNING

B.E. in Artificial Intelligence & Machine Learning at SJEC is a four-year degree programme, with a current intake of 60, Autonomous under VTU-Belagavi. The programme is currently handled by the Department of Computer Science and Engineering.

Artificial Intelligence (AI) and Machine Learning (ML) are being looked as the drivers for the next industrial revolution happening in the world today. Artificial Intelligence has been utilized in various fields like Medicine, Language processing, Finance, Education, Transportation, Business, Law and more.

Artificial Intelligence is the branch of Computer Science that emphasizes the development of intelligent machines which think and work like humans. With the advancement in technology, we are already connected to AI in one way or the other – whether it is Siri, Watson or Alexa. More and more companies are investing resources in Machine Learning (ML), indicating a robust growth in AI products and apps in the near future.

AI and ML are integral parts of data science, where techniques from both such as regression, predictive analytics and more are applied for insight generation. Job Opportunities for AI & ML engineers such as - Business Intelligence Developer, Research Scientist, Full stack developer, Software architect, Data analyst, Data warehouse engineer and Product manager are highly demanding. Demand for AI and ML engineers is projected to be 1,25,00 in the next five years.

The four-year engineering course in AI and ML at SJEC offers subjects like Introduction to Sensors, ML with Python, Big Data Analytics, Natural Language Processing (NLP), Applied Statistics, Expert System, Fuzzy Logic, Virtual Reality , Robotics Process Automation (RPA), Internet of Things (IoT), Speech Processing, Computation Intelligence, Pervasive Computing, Knowledge and Data Engineering, ML and AI for Healthcare & Agriculture, Deep Learning, Game Theory, etc.



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DEPARTMENT OF MECHANICAL ENGINEERING



The Department of Mechanical Engineering was established in the year 2002 with the vision of nurturing technically competent and socially responsible Engineering Professionals. The Department believes in the overall growth of the students in both curricular & co-curricular activities, and encourages them to participate in various paper presentation, seminars, workshops, industrial visits and other technical activities and strives to prepare students for career across a broad range of industries.

All of the Department laboratories and workshops are accessible to students for conducting project work, curricular lab work and other mini projects. The Department proudly announces accreditation of its B.E in Mechanical Engineering programme by the NBA, New Delhi for the third time which is valid till June 2022 and also permanent affiliation status from VTU Belagavi for the academic year 2019-20 to 2024-25.

► Programmes offered

- BE** – Mechanical Engineering with 120 intake
PhD

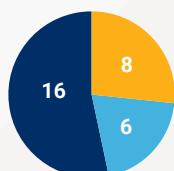
The Department has entered into MOUs with

- FESTO India Pvt Ltd
- V&G Industrial Testing Laboratories Pvt Ltd
- SKF Boilers and Driers Pvt Ltd
- Karnataka German Technical Training Institute (KGTTI)
- Malnad College of Engineering
- Christ (Deemed to be University)

► Best Practices in the Department

- Technical and general aptitude training
- Tutorial / Remedial Classes for Slow Learners.
- Simulation based learning through Virtual Labs
- Faculty blogs on course curriculum and course web pages
- Interdisciplinary mini-projects
- Department E-Magazine every year

► Faculty Strength



- PhD
- Pursuing PhD
- MTech / ME / MSc



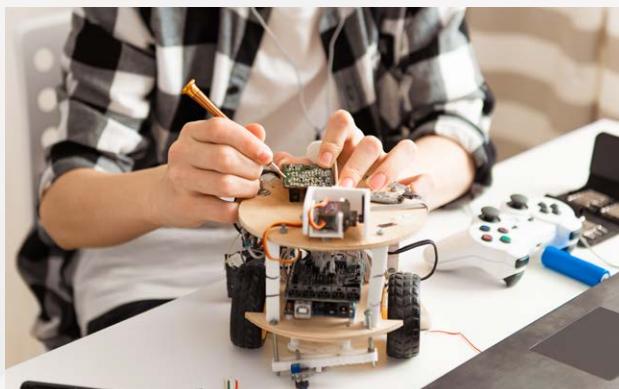
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DEPARTMENT OF ELECTRONICS AND COMMUNICATION ENGINEERING



The Department of Electronics and Communication Engineering was established in the year 2002. The vision of the department is to empower students with the skills required to thrive in the field of Digital Electronics, VLSI, Robotics, Wireless Communication, Optical Communication, Embedded Systems, Biomedical Engineering , IoT and Artificial Intelligence.

To enable this vision the department is equipped with state-of-the-art laboratories

with the latest industry-standard tools and applications like Cadence VLSI Design Suite, Xilinx Vivado-2018, MATLAB 2021, ARM CORTEX, LabVIEW, Multisim, NEXYS 4 DDR Artix-7 FPGA Board, Analog Discovery, Digital Storage Oscilloscopes, and Work stations. The department has well-qualified faculty who are specialized in their respective domain and are actively involved in research.

► Programmes offered

BE – Electronics and Communication Engineering with 120 intake

PhD

The Department has entered into MOUs with

- Father Muller Medical College Hospital
- KarMic Design Private Limited
- DST-NUTEC
- Cyclops MedTech Private Limited
- Tessolve Semiconductors
- College of Electrical & Information Engineering, Asia University, Taiwan

► Best Practices in the Department

- Encouraging students for Product and Research oriented Projects.
- Implementation of Active Learning Strategies, Collaborative, Project based Learning and use of Learning Management Systems in all Courses.
- Bridge courses for difficult subjects and Open-ended experiments in all Labs.
- Industry Orientated Activity Labs, Industrial Visits, Internships, Online Courses, Remedial Classes and Gate Coaching.
- Peer Teaching/ Learning and unique Mentoring Process by each Faculty.
- Alumni and Industry Interactions.

► Faculty Strength



- PhD
- Pursuing PhD
- MTech / ME / MSc



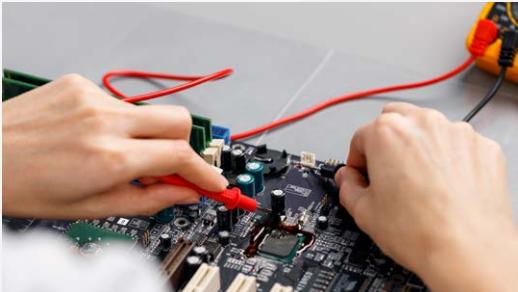
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DEPARTMENT OF ELECTRICAL & ELECTRONICS ENGINEERING



The Department of Electrical & Electronics Engineering (EEE) offers a programme in Bachelor of Engineering with an intake of 60. It is a four year (eight semesters) Programme. This programme is autonomous, affiliated to VTU, approved by AICTE and Accredited by NBA. The Department has a well-balanced mix of senior & experienced faculty together with young & dynamic faculty. With the objective of making graduates industry ready, the

Department modernized all laboratories using latest Softwares such as MATLAB, ETAP etc. and hardware such as Contactors, Industry standard Relays, DSOs etc.. The Power System Protection Relay Laboratory is a one of its kind laboratory in an educational institute. The laboratory experiments are designed to improve the skills of students in applying knowledge learnt in classroom which builds students confidence in working on various electrical apparatus and equipments.

► Programmes offered

BE – Electrical & Electronics Engineering
with 60 intake

PhD

The Department has entered into MOUs with

- Decibel Labs, Bengaluru, for training on Electric Vehicles
- TATA Power Skill Development Institute, Pune, for training in power system studies.
- RUSEMP College, Pakshikere for skill development of rural youth.

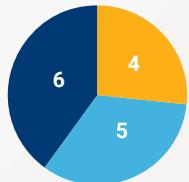
► Best Practices in the Department

- Use of learning management systems to enhance the learning of student outside classroom.
- Regular feedback on Teaching Learning Process to make sure that students are learning.
- Innovative teaching pedagogy to stimulate learning in all types of learners.
- Seminars and Guest Lectures by Industry experts and Alumni to orient students towards industry.
- Regular Industrial visits to experience the industrial work culture and ambience.

► Industry based Softwares used

- ETAP Automations- Power System Simulation Software
- LABVIEW from National Instruments - Multipurpose virtual instrumentation software

► Faculty Strength



- PhD
- Pursuing PhD
- MTech / ME



Mr Satisha K

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DEPARTMENT OF CIVIL ENGINEERING



A vibrant Department, established in 2012, the Civil Engineering Department aims at contributing graduate engineers equipped for careers in the public and private sector, encompassing areas such as structural engineering, geotechnical engineering, water resources, transportation, environmental and construction industries.

Apart from the syllabus, students are encouraged to take up mini projects on various disciplines. Frequent visits by guest faculty and professionals from academia and industry helps in sharing their valuable experience and keep students abreast with the latest advancements. Department also facilitates industry based software AUTO CAD, STAAD-PRO, ETABS, QGIS, Microsoft Office Project.

► Programmes offered

- BE – Civil Engineering with 60 intake
- PhD

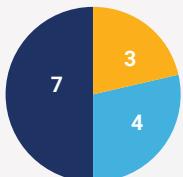
► Research Facilities

- Microbiology lab
- Advanced concrete lab
- Environmental engineering lab

► Other Facilities:

- Testing and consultancy center
- SJEC - Centre for sustainable technologies
- Shilpa -Modelling Lab

► Faculty Strength



- PhD
- Pursuing PhD
- MTech / MSc

The Department has entered into MOUs with

- Marian Projects Pvt Ltd
- Master Plannery Nirmithi Kendra

► Best Practices in the Department

- Continuous motivation by rewarding the top scorers of university examinations
- Conduction of various technical activities such as Technical Talks, Industrial Visits under departmental association "NIRMAN".
- Career Guidance through Motivational Talks by Alumni
- Innovative Teaching Learning Practices
- Department E-News Letter



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DEPARTMENT OF BUSINESS ADMINISTRATION



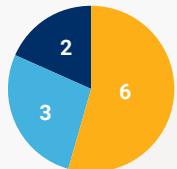
The Department of Business Administration was started in the year 2007 as a post graduate Department of SJEC. The Department of Business Administration offers a two-year full time MBA programme approved by AICTE, Ministry of HRD, Government of India and is affiliated to Visvesvaraya Technological University (VTU), Belagavi, Karnataka with an intake of 120 students. The Department offers dual specialization (Finance-HR/HR-Marketing and Marketing-Finance). The Department is a recognized research centre of VTU for PhD programme in management studies.

► Best Practices in the Department

- Industry Certifications on Data science and Digital marketing by KPMG and Google.
- 100% placement support through our industry partners- Cocubes and JV Global.
- Certification programs on IT for business conducted by domain experts from the engineering department.
- Enhancing employability and life skills through V-ACT and Placement mentoring.
- Bridging Industry-Academia skill gap through organizing Expert talks by Industry persons on a wide range of Management issues.

- Continuous alumni student interaction to appraise the latest trends in the industry.
- Organising Management Development Programs on the emerging areas in business for improving productivity at the workplace.
- Bettering managerial and intellectual skills of students through organising Management fest, Student Conference and Business Plan contest.
- Initiating mini research projects for MBA students to equip them with research and analytical skills.
- Nurturing social, ethical and moral values of MBA students through community engagement, outreach programme and volunteering.

► Faculty Strength



- PhD
- Pursuing PhD
- MBA

The Department has entered into MOUs with

- Kanara Small Industries Association (KSIA)
- Kanara Chamber of Commerce and Industry (KCCI)



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MBA in Innovation, Entrepreneurship and Venture Development -(MBA - IEV)

The MBA (IEV) program is designed to connect theory of innovation and entrepreneurship with practice and enabling students to acquire skills. This program will be delivered in phases and modules. This outcome oriented program will facilitate learning on management of innovation, entrepreneurship and venture development from foundation to advanced stages and simultaneously enable students to apply their entrepreneurial skills in real life situations, validate ideas, build innovations, test market and build a successful venture out of it.

Eligibility & Selection of Candidate:

The minimum academic eligibility for a candidate to apply for this program should be a graduate having atleast three years' degree program recognized nationally. The admission procedure of VTU Belagavi is applicable.

Career and Employment Opportunity:

- The objective of this program is to prepare young minds towards self-employment and create employment opportunity for others through enterprise development.

One of the
21 colleges in the
country to offer
the programme.

- Bring out more job creators who will start and thrive with their own start-ups launched during the study period.
- Graduates from this program also will find lots of opportunities to team up with start-ups as cofounder or core team because of their close understanding and working experience in innovation and entrepreneurship throughout their study period.
 - Furthermore, these graduates will be preferred candidates to get the assignment to coordinate and lead pre-incubation centers in academics such as Entrepreneurship Development Cells (EDC), IEDC, New Gen IEDC, Start-up Cell, Innovation Cell etc.
 - With their experience and interest, further job opportunities to get absorbed with incubation units, acceleration unit, angel and VC firms etc. Even, these graduates will find preferential space to work with CSR arm, social enterprise arm and spinoff arm of corporate, NGOs, social enterprises.

Newly Launched for the
Academic year 2021-22
with 30 intake



DEPARTMENT OF COMPUTER APPLICATIONS



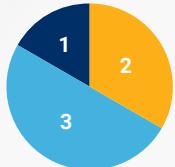
The Department of Computer Applications offers a two-year Post Graduate MCA programme affiliated to VTU-Belagavi. The programme is offered with a mission to meet the global needs and challenges through training of professionals who can work with interest to support the society. The Department has a team of experienced and motivated faculty members who are in process of tuning the young minds to make them globally competitive. The strength of the Department is highly motivated students who understand the dynamics of the industry and upgrade their skills accordingly.

► Programmes offered

Master of Computer Applications with 60 intake

The Department has entered into MOU with Accolade Tech Solutions

► Faculty Strength



- Pursuing PhD
- MCA
- MSc(IT)

► Best Practices in the Department

- **Career and Employability Support**
 - Project Based Learning
 - Seminars
 - Mentoring
- **Life-Long Learning for Personal Development**
 - Encouragement for taking up online courses
 - Spoken Tutorials
 - Industrial Internships



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BASIC SCIENCE DEPARTMENTS

PHYSICS



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The Department of Physics was established in the year 2002 and has maintained a credible record of teaching and research. The Department mission is to impart the basic concepts of science to the evolving engineers, which enables them to be high quality engineers and prepare them to meet the needs of the nation. The Department has established a research centre and received multiple research grants of more than 35 lakhs. The research centre has already produced three Doctorates and 5 Research Scholars are currently pursuing their PhD. The faculty have published more than 50 papers in the international journals and presented more than 80 papers in the national / international conferences. The department association 'Epsilon' conducts various activities to help the students in advancement, dissemination and application of knowledge of physics in engineering applications

MATHEMATICS



Dr Jagadeesha B.

Associate Professor and Head
Ph: 0824 2263753 Ext: 148
Email: hod.maths@sjec.ac.in

The Department of Mathematics provides a strong foundation in the basics of Mathematics, which are the building blocks of all subjects of engineering disciplines. The Department also teaches essential subjects for MCA & MTech which are helpful for students pursuing Master's Degree. The Department has senior and experienced faculty together with young, dynamic faculty members. The Department is constantly getting good results in VTU exams (more than 90%) with many students securing First Class with Distinction. The Department association SIGMATHS contributes substantially towards growth of individual students by motivating and helping them to clear competitive exams.

The Department is a recognized research centre of VTU to promote research activities. Currently, three faculty members are pursuing PhD in the research centre.

CHEMISTRY



The Chemistry Department pledges itself in the broadest and most liberal manner to encourage the advancement of all branches of engineering through its practically skilled education and service missions.

The Faculty members of the Department are dedicated to superior teaching and excellence in research activity. The Faculty has evolved a dynamic learning environment that accentuates student-centered learning, flexible interdisciplinary thinking and research.

The well equipped, spacious lab provides safe and comfortable working environment for 35 students at a time. In the laboratory there is seating arrangement for all students during instructions and demonstrations. There is a good stock of chemicals, which is being replenished from time to time. The Department is a VTU recognized research centre promoting research activities.

RESEARCH FACILITIES

UV-Visible Spectrophotometer

- Measurement of Time-dependent Change of Metal Nanoparticles
- Quality Control of Film and Filter
- Measuring the "Color" of Glass Plates
- Micro-Volume DNA Quantization Using TrayCell
- Trace Measurement of Chlorophyll-a - Single-Drop Measurement Using TrayCell and the Utilization of Sub-Micro Cells



Electrochemical Analyzer/Workstation- Model 608E :

Cyclic voltammetry, Linear Sweep voltammetry, AC Impedance, Impedance -Time, Impedance- potential, chronopotentiometry, chronoamperometry, chronocoulometry, Tafel plot, Multi current steps, Potentiometric stripping analysis, electrochemical noise measurement, open circuit potential- time, bulk electrolysis with coulometry etc.



Dr K Jyothi Damodara

Professor and Head

Ph: 0824 2263753 Ext: 123

Email: hod.chem@sjec.ac.in

DEPARTMENT OF HUMANITIES



The English Language Computer Laboratory is equipped with licensed interactive software for mastering the skills of the language in a learner friendly atmosphere. Humanities Department teaches Kannada, Ethics, Environmental and Constitutional studies, helping students to live as good citizens of the Country.

PLACEMENT AND TRAINING

"It is often during the most challenging times where there is the greatest opportunity to redefine yourself"- Silagh Mirgain

With the Pandemic impact the companies have evolved big time and the entire landscape of recruitment has gone digital. One of the most fundamental areas that's rapidly changing is student recruitment where recruiters have traditionally attracted new students through on-campus events and tours.

2020 – 21 was a year of change. A change that we saw brought huge impact specially for the graduating students from the engineering and management institute in terms of the skills and employability. SJEC too witnessed this change. In spite of Covid, SJEC had 70+ companies visiting the campus virtually. The quality and quantity of companies hiring from campuses has not changed much compared to previous years, especially for computer science, IT, electrical and electronics streams, but it has only opened doors to multiple opportunities from companies that would otherwise not visit a particular region.

The recruitment process of 2020-21 batch is still ongoing while SJEC had surge in offers for the 2020 batch of graduating students. We continue to train our students and upskill them to be employable. At SJEC, recruiters find the required talent and have been consistent in recruiting year on year. We are proud of our students who are placed in esteemed organizations thereby building a brand of SJEC globally.

“

It's not what you achieve, it's what you overcome. That's what defines your career.

—Carlton Fisk



Ms Sangeeta Ferrao
Placement Officer
Ph: 0824-2263763 Ext: 124
Email: placement_sjec@sjec.ac.in



PLACEMENT HIGHLIGHTS - 2020 - 21



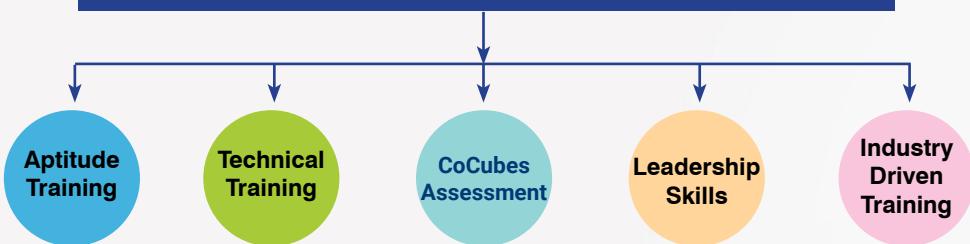
TRAINING FOR LIFE

V-ACT is a highly ambitious training initiative of St Joseph Engineering College in Collaboration with the Office of Training. It comprises of Values & Attitude training, Aptitude Training, Career Guidance and Technical Training all under its banner. At V-ACT, our aim to work as a unified team, and contribute to the growth of the Institution by providing the students with the tools and training necessary to be employed in the company of their choice and career enhancements.

Our mission at V-ACT is to contribute to the success of the students and their careers by designing, developing, driving and delivering strategic, measurable and effective competency development programs.



COLLEGE LEVEL TRAINING INITIATIVES



Mr Sathyendra Bhat
Head - Placement & Training
Email: head.tpc@sjec.ac.in



HIGHER STUDIES AND CAREER DEVELOPMENT

The Office of Collaborations at St Joseph Engineering College was established in the year 2018-2019 to oversee and coordinate the on-campus international activities, focusing on providing directions, assistance, synchronizing the collaborative work of SJEC with Overseas Universities.

So far, the Office of Collaborations has drawn 9 MOUs, out of which five are with universities abroad, in the U.S., Taiwan, Ireland and, four are with consultants abroad. SJEC is engaged in active collaboration with these universities for our students.

SJEC being a Nodal Centre for the IELTS exam registration provides students with all related preparation for the IELTS exam when they enrol through our office.

Through our international partnerships, we facilitate collaborations like Study Abroad Programmes, Internship Programmes, Articulation Programmes, Student Exchange Programmes as well as Faculty Exchange Programmes to ensure that our graduates are ready for a flourishing professional career in their field of choice abroad.

Summer Abroad Program



Mr Sudeep Gonsalves

Final year -E&C secured 5th rank for the 2020 Artificial Intelligence program at Asia University for the Taxi Project.



Ms Enola Lesni Coelho and Mr Dheeraj Nayak M

Final year CSE completed the Web Design and Artificial Intelligence program at Asia University, Taiwan.



Mr Ryan Fernandes

2nd year Mech student completed Solar Installer's Utility Scale Solar PV program in collaboration with AIESEC



Mr Nolan Pereira

Final-year EEE h completed Roben Aast Remotely Operated Vehicle (ROV) program in collaboration with AIESEC

Abroad Internship

Every year the number of students opting for higher studies is consistently increasing. In this regard, the Office of Collaborations has been guiding students by providing counseling for students on higher studies,

organizing sessions and workshops, abroad university fair, training students on competitive exams like IELTS, GRE, GMAT, etc.

Studying at SJEC, now, has become a unique experience for students in India and the future for foreign students as well.



Ms Diana Monteiro

Collaborations Officer
Ph: 0824-2263753 Ext: 149
Email: sjec.connect@sjec.ac.in

Great Learning and Great Expectations...

THE CENTRAL LIBRARY

The Central Library located in the heart of the Campus, provides an ideal environment for intellectual inquiry with its spacious reading halls, research, learning and instructional resources. The state-of-the-art ICT facilities established to offer value added services to the stakeholders to explore scholarly information, learn and create new knowledge. All house-keeping operations are automated using library management system. The well qualified and experienced information professionals serve the user community with excellence. The library is kept open from 8 am to 10 pm on all the working days and 9 am to 1 pm on Sundays and Holidays.

► Best Practices

- Library Management Software
- Online Library Catalogue
- Library web page
- Readers Club
- NDLI Club
- Best user award
- User awareness training programmes/ workshops/quiz/activities
- Book Exhibitions/competitions
- User Survey

► Services & Facilities

- Book lending
- Reference
- Overnight issue of reference books
- Book Bank (General & SC/ST)
- Digital Library
- Wi-Fi & Bar code technology
- Self & E-learning
- Remote access to e-resources
- Photocopy/Scanning/Printing
- Self-study & General Reading Rooms



► Teaching/Learning/Research Support E-Resources

- VTU Consortium E-Resources
- Turnitin Anti-Plagiarism Software
- Scopus Citation Database
- Knimbus Remote Access
- Mendeley Reference Management
- Net-Analytiks Grammarly
- Mobile Library App
- SWAYAM NPTEL Programmes
- VTU E-Shikshana Programmes
- Shodhganga E-Thesis Repository
- E-question Papers
- Compendium of Research Publications
- DOAJ Open Access

► Library Collaboration

- VTU Consortium
- DELNET
- National Digital Library India



Dr Felcy D'Souza

Librarian

Ph: 0824-2263753 Ext: 105

Email: librarian@sjec.ac.in

Sportsmanship to the fore!

DEPARTMENT OF PHYSICAL EDUCATION

The Physical Education Department is committed to maintain the physical fitness of students throughout their studies at SJEC. Physical Education Department is well established with all sports and games amenities:

- 400 m Athletic track, Football, Cricket, Hockey and Handball Courts.
- Volleyball Court.
- Throw-ball Court.
- Basketball Court.
- Kabaddi Court.
- Netball Ball & Ball Badminton Court.
- Four shuttle badminton courts for both men and women.
- A well-equipped multi gymnasium facility for men & women in their respective hostels.
- Indoor facilities like Table-Tennis, Carrom and Chess etc.
- Cycle Path for fitness purpose.

With strong focus on inculcating good sportsmanship spirit and discipline, we conduct regular training and practice sessions on various sports and games. Our students have been



able to showcase consistent performance in various University / National Level meets and we are very proud of their achievements.

The College sports and games teams participated in Cricket, Basketball, Football, Throwball, Volleyball, Handball, Hockey, Table-Tennis, Swimming, Netball, Ball Badminton, Best Physique, Weight Lifting, Power Lifting, Wrestling, Judo, Chess and Athletics in the VTU zonal and inter-zonal levels and won many prizes.



Ms Vaneesha V Rodrigues
Physical Education Director
Ph: 0824 2263753 Ext: 128
Email: sports@sjec.ac.in



WHAT STUDENTS ON CAMPUS HAVE TO SAY...

“

SJEC is an ocean of opportunities. It has provided a platform for me to enhance my skills through constant encouragement, support, and opportunities to showcase my skills. This motivated me to learn new frameworks and tools and stand out from the crowd. SJEC has made me the developer I am today.

Shanwill Pinto, Third Year CSE
Flutter Developer



“

Since my first year, SJEC has provided me with abundant opportunities as well as a platform to make an impact on myself and the world around. I have been able to showcase my passion for music at many levels, be it virtual or live events. Besides, I have been able to prioritize both my talents and my academics at this place. Indeed, the management and faculty have helped me and every other student here at SJEC to pave a pathway for their dreams.

Janice Mendes, Student - Third Year CSE



“

SJEC has taken giant steps towards providing innovative and progressive opportunities for its students. Indeed, my talents have always been nurtured under the guidance of a very supportive staff and my teammates. Throughout my academic year, I have designed a prosthetic arm, an Emergency Medical bag, and worked as a project lead for developing a robot for the Automation and Robotics Club. Being a part of a versatile dance team has helped me enhance my co-curricular talents as well!



Neil Lasrado
Third Year ME

“

SJEC, can be summarized but not limited to the title of the "Land of Opportunity". Along with my basic Computer Science Engineering course, I've ventured fields and explored disciplines that I had never imagined I'd step foot in. Over the duration of just two years, with immense support and help from the institution upholders, the IUCEE Student Chapter was set up and I was able to become the President of the association. Moreover, the college enabled me to attend an entrepreneurship course conducted by the University of Massachusetts, Lowell which helped me explore the field of Business; And under their guidance I was able to fulfill the role of Co-organizer of TEDx. SJEC is truly a place for potential waiting to be unveiled.

Sarah, Second Year CSE



“

SJEC has helped me grow in every aspect. For my project on prosthetic arm, I worked with faculties belonging to different departments in the college, and they have nurtured me as an ambitious student which in return, has helped me to multi-task. I was provided with numerous opportunities that involved; ideating, innovating and prototyping. Indeed, this college has guided me on a journey to become an advanced problem-solver.

Avinash Paul Fernandes, Third Year EEE



WITNESS TO TRANSFORMATIONAL CHANGES...

“

SJEC offers an efficient and ideal environment where one could learn, enhance their skills and be challenged. It fosters you to evolve as a true professional. What they teach you here is not just knowledge, but experiences. A pool of never ending opportunities to chase your dreams!

Diona Daniel D'Silva

MCA (2019-20)

Systems Engineer, Infosys, Mangaluru



“

SJEC has a very friendly campus atmosphere, with deeply committed faculty. Various tech-fests are held every year, they give you a golden opportunity to socialise and hone your leadership skills.

SHREEYA SHENOY

ECE (2010-11)

IT Professional



SJEC harbours countless opportunities, be it in Academics, Placements, Sports or Extra Curriculars. It is indeed a place where the right talent meets the right opportunity.

Ms Laulita Miranda

EEE (2019-20)

Electrical Engineer

Lam Research, Bengaluru

”



SJEC is the top-notch institute for Engineering Education.

SJEC prepares and inspires students in a strong undergraduate environment to become servant leaders who apply their knowledge to benefit society.

Mr Karthik Madhyastha N

Mech Engg (2010-11)

Assistant Engineer

Water Resources Department, Govt of Karnataka

“

SJEC is a wonderful place for learning and developing skills, which has been a perfect blend of education and joy. It has helped us to create opportunities, withstand the hardships by developing dedication, improving discipline and developing a strong character.



Mr Alen Baptist D'souza

Civil (2015-16)

Consulting Civil Engineer

Alen & Johnsons Civil Engineering Consultants
Madanthyar

Build it and Race it!

SAEINDIA-SJEC COLLEGIATE CLUB

SAEINDIA is an affiliate society of SAE International registered in India as an Indian nonprofit engineering and scientific society dedicated to the advancement of mobility industry in India.

The SAEINDIA SJEC COLLEGiate CLUB was launched in April 2016 and has developed an All Terrain Vehicle— THE TURTLE, in accordance with the specifications of SAEINDIA for participating in the internationally renowned SAE BAJA.

► BENEFITS FOR STUDENTS

- Campus Placements
- Placements during BAJA
- Hands-on experience of vehicle design & Development

► TEAMS:

- Team SJEC Racing
- Team eSJEC Racing
- SJEC Aero Team
- Team Artemis Racing - Go Kart

Team SJEC Racing and Team e-SJEC Racing have participated in SAEINDIA BAJA 2021 held virtually from April 21-25, 2021 and Team e-SJEC Racing achieved Overall All India 8th Rank.

FACULTY COORDINATORS



Mr Yathish Kumar
Asst Professor-Mech



Mr Vijay V S
Asst Professor -Mech

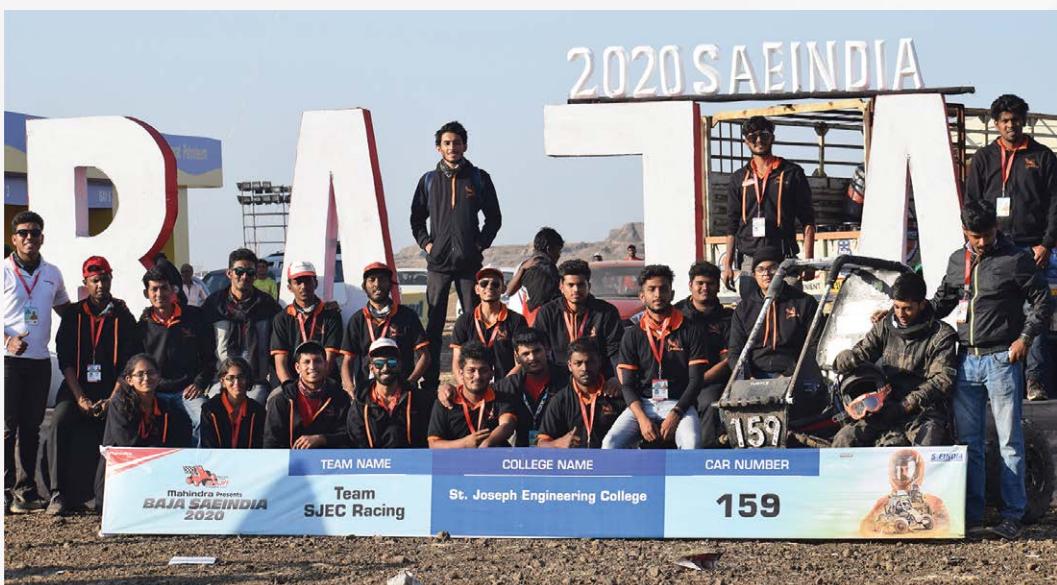
STUDENT LEADERS



Kaushik K
Final year -ME



Supreeth Amin
3rd Year ME



Eco Friendly Transportation!

ISIE SJEC COLLEGIATE CLUB

ISIEINDIA is the most popular and favourite E-mobility Motorsports, Education and Research Publication organisation in India among engineering institutes and green energy research organisation. ISIEINDIA become the epicenter of green energy concept development in India. They are motivating people (Engineers + Future Engineers) to work on New and



Renewable Sources of Energy. They give the platform to new start-ups, Innovative ideas and to passionate people, who really want to contribute to society.

TEAM ACHILLIUS

Designed & Fabricated Solar Vehicle : Under the banner of ISIE-SJEC Collegiate Club Team Achillius has developed much better and efficient solar car version 2.0

The next generation Solar Electric Vehicle, Raptor 2.0 was unveiled just a week before the unpredictable nationwide lockdown which led to the competition being held virtually. Through it was unfortunate, the team have taken it as a challenge and maintained their dedication towards excelling which is clearly evident in the results they achieved. In the event they have secured All India 3rd Rank.



FACULTY COORDINATOR



Mr Yathish Kumar
Assistant Professor-Mech

STUDENT LEADER



Sohan Paul
Final Year -ECE

TERRORBULL ROBOTICS

One of the first teams from Karnataka to represent the state at National and International robotic events.

The team builds and develops Wireless Combat Robots, Autonomous Robots, Drones, Hobby RC such as cars, boats, hovercrafts and remotely operated rovers. The team members have also designed and built various devices like radio transmitters, motor drivers, welding machines for battery contacts etc. Terrorbull has participated and won in various National level events such as BITS- Goa, IIT Madras, SPCE -Andheri, NIT-Warangal and has participated in International Robowars for two consecutive years at IIT-Bombay TechFest.



Towards Industry 4.0

AUTOMATION AND ROBOTICS CLUB ARC-SJEC

The Automation and Robotics Club of SJEC is a Collegiate Club driven by the Department of Mechanical Engineering. The Club provides its members' opportunities to carry out projects related to Automation and Robotics, and related disciplines. The Club also conducts training programs and workshops on topics related to Industry 4.0.

ARC-SJEC also houses the e-YANTRA Lab developed in association with IIT-Bombay.

Activities:

- Hands-on trainings and Workshops on Automation & Robotics
- Design and development of J-Bot - V2 - An Autonomous Navigation Robot.
- Training for participation in Robotics competitions. (WRO Olympiad, NI-Yantra, E-Yantra, Robocon India etc.)
- Technical support for Final Year Student Projects.
- Working towards Industry 4.0.

STUDENT LEADERS



Carol S Rebello
President



Akanksha J Anchani
Vice President



Aishwarya
Secretary



KARAN B
Joint-Secretary

FACULTY COORDINATORS



Dr Binu K G
Associate Prof. -Mech



Mr Vijay Ganesh P C
Asst Professor-ECE



Ms Laveena D'Silva
Asst Professor-CSE



Mr Rahul Kumar
Asst Professor-Mech

IEEE - INSTITUTE OF ELECTRICAL AND ELECTRONICS ENGINEERS

IEEE is the world's largest technical professional organization- dedicated to advancing technology for the benefit of humanity. Keeping this in mind, St Joseph Engineering college has established IEEE SJEC Student branch to keep the students updated with the latest technology through seminars, workshops and talks from distinguished members of industry and academia, project exhibition and competitions, conferences, student activities, student competitions etc.



IEEE SJEC Student branch comes under IEEE Mangalore Subsection under IEEE Bengaluru Section, under Region 10 (Asia Region).

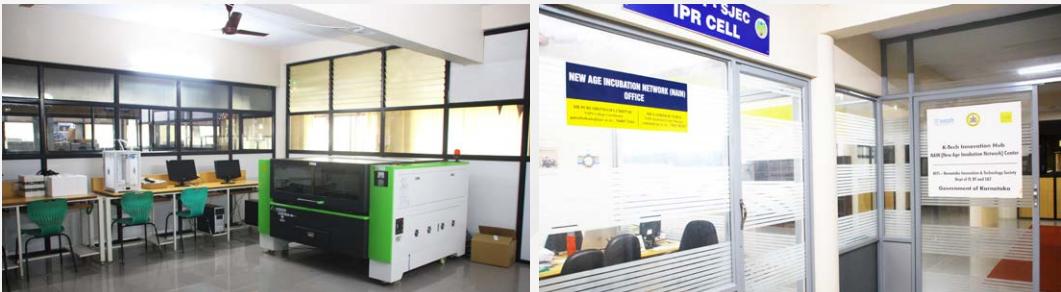
The Student branch currently also has the following four society chapters so that students can become part of it and explore in domain related technology.

1. Computer Society
2. Communication Society
3. Power and Energy society
4. Technology and Engineering Management Society

IEEE also has a Women in Engineering affinity group which is aimed at dedicated to promoting women engineers and scientists, and inspiring girls around the world to follow their academic interests in a career in engineering and science.

Boosting Startups on Campus!

INNOVATION AND ENTREPRENEURSHIP



The New Age Incubation Network – NAIN was established at SJEC in the year 2019. It is sanctioned by the Department of Information Technology/Biotechnology and S&T, Govt of Karnataka with the objective:

- To Promote ICT sector
- To encourage students, research scholars and alumni to share their ideas to solve chosen problems which are local centric and to Validate, Refine and Nurture ideas.
- To provide an ecosystem to convert ideas into proofs of concept and upgrade them to a level of commercial value.
- To encourage and lead the teams towards setting up a business enterprise.

This Incubation Centre has an approved funding of 1.2 Crores sanctioned by the Govt of Karnataka. The centre will facilitate 10 projects to receive a grant of Rs 3 lakhs per year for an approved period of 3 years. The SJEC Incubation Centre with working space of 4000 sqft facility can accommodate up to 15 start-ups simultaneously. This state-of-the-art facility includes well-furnished seating arrangements, high configuration computers, independent high-speed dedicated internet connection, uninterrupted power back up and discussion & meeting rooms, laser cutting machine, 3D printer. The IPR cell established in collaboration with Karnataka Science Council for Science and Technology (KSCST) helps in bringing awareness about IPR, enables patent searches, guides inventors in respect of patenting searches, facilitates filing of patents etc. Ideation, hackathon and other entrepreneur related workshops, competitions, and talks are being conducted under this banner to motivate the students towards entrepreneurship.



The Best of Professional Skills!

AICTE IDEA LAB

St Joseph Engineering College (SJEC), Mangaluru, has emerged as one of the 49 institutions from across India to be selected by the All India Council for Technical Education (AICTE) for establishing AICTE IDEA (Idea Development, Evaluation & Application) Labs. This achievement comes just after the college being identified as one of the 255 institutions pan India to have received approval for implementation of the National Innovation and Start-up Policy (NISP).

The IDEA Lab is aimed at encouraging students to apply Science, Technology, Engineering and Mathematics (STEM) fundamentals towards enhanced hands-on experience, learning by doing and product visualization. The IDEA Lab will make engineering students more imaginative and creative in addition to imbibing skills of critical thinking, problem-solving, design thinking, collaboration, communication and lifelong learning. The lab shall have an area of 5000 sq. ft. equipped with advanced machinery, tools, and mechanisms

to support the translation of an idea to prototype development or solution of a problem.

The duration of this project is two years and the total cost for establishing the IDEA Lab is Rs 110 lakhs. The AICTE will provide approximately 40% of the total project cost and the remaining 60% is to be borne by the institute with possible sponsorship from industry partners. Beyond two years, the institute will spend another Rs 40 lakhs to sustain the IDEA labs.

The presence of Tinkering and Engineering Exploration Labs, NAIN Innovation Centre and AICTE IDEA Labs on the campus provides an ecosystem to convert ideas into proof-of-concept and upgrade them to the level of a product with commercial value.



Experiential Learning on Campus...

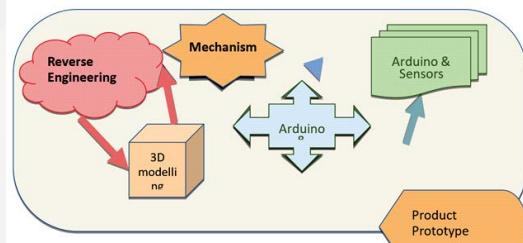
TINKERING & ENGINEERING EXPLORATION LABS

Tinkering and Engineering Exploration Laboratory is an additional course included for the First Year Students. In this course, students are exposed to problem solving through design thinking, interdisciplinary approach, and team work.

Engineering Exploration Lab

"It's a big world out there, go explore!"

The Engineering Exploration sessions of the



course focus on the students to learn as a team as compared with the individual learning that happens in regular classrooms. The flow of engineering exploration sessions is shown in the figure. Open ended questions trigger the young minds to think beyond concepts learnt in classrooms and indulge in creative thinking.

Tinkering Lab

While the Engineering Exploration sessions allow the students to explore the use of virtual tools and understand the concepts, the hands-on practical

work comes in the Tinkering Lab. Simple problem statements are given to each group, with minimal assistance from the faculty the groups will have to carry out the activities and solve problems. This approach will strengthen the core concepts that are learnt by the students.

Outcomes:

- The activities conducted in Engineering Exploration and Tinkering lab helps the first-year students to experience the dynamics of team work.
- The course helps the students to sharpen their communication skills.
- The importance of ethics in project reports and presentations are engrained.

This lab course also gives students a deeper understanding of:

- o Applied Physics
- o Kinematics and Dynamics
- o Design thinking
- o Interdisciplinary problem solving

The students will get the opportunity to complete projects on:

- o Spider robots
- o Home automation
- o Line following robots
- o Smart dustbins



International Expertise Brought to the Campus...

SJEC COLLABORATIONS WITH IUCEE

SJEC is an active member of the Indo-Universal Collaboration for Engineering Education (IUCEE). SJEC has been associated with IUCEE for the past 14 years, initially by actively participating in the Faculty Learning Institutes (FLI), which were organized throughout the country, and in the last five years, as a consortium college. SJEC has been an active member in all IUCEE ventures, be it ICTIEE, IIEECP certification, Engineering Education Research course, Foundation Course on Research Methods, Cluster for Collaborations, IUCEE courses, Student Chapter, NEP Mission or the Virtual Academy.

The Principal of SJEC, Dr. Rio D'Souza has been recognized as one of IUCEE's global experts, which is a matter of great pride to the college.

Over 96 faculty members have completed IUCEE International Engineering Educator Certification Program (IIEECP). Other than IIEECP, 23 other courses with more than 300 participations have been organized in association with IUCEE.

Six faculty members under the leadership of Mr Keith Fernandes were a part of ICTIEE 2021 Technical team.

Awards and Recognitions:

- Institutional Award for Transformational Leaders in Engineering Education 2017 - ICTIEE 2018
- Excellence in Performance of TLCs - ICTIEE 2021
- Excellence in accomplishments by IIEECP Certified Faculty - Dr Binu K G and Mr Keith R Fernandes (2)
- ICTIEE Best Paper Awards (3)
- Dr Shreeranga Bhat - ICTIEE 2020
- Dr Binu K G - ICTIEE 2021
- Dr Rio D'Souza, Mr Sathyendra Bhat, Mr Ragesh Raju - ICTIEE 2021



Technical Expertise put to Test!

SJEC - ISTE CHAPTER

The fundamental motive of the ISTE Student Chapter is to provide guidance and training to students to develop better learning skills and personality.

The special feature of the ISTE is that it is the leading National Professional non-profit making society for the Technical Education System in our country with the motto of Personality Development of students, Career Development of teachers and the Overall Development of our Technical Education System.

► Objectives of SJEC-ISTE

1. To provide professional guidance and training to the students to upgrade their knowledge and skill.
2. To promote and contribute in the production of top-quality professional engineers to meet the demands of industry and other organization.

► Benefits of Membership

1. A Member of a National Professional Organization.
2. Joined an academic Fraternity of over 1, 24,000 strong professional.
3. Preference to attend short-term training program for the academic excellence and to become eligible for career advancement opportunities.
4. Quarterly Indian journal of Technical Education (at concessional rates).
5. Eligible to participate in Chapter level, Section level and National Level Conferences, Workshops and other activities of your academic interest etc.



Mr Winston Sebastian Pais, a third-year Computer Science and Engineering student of St Joseph Engineering College (SJEC), Mangaluru, brought laurels to the institute by winning the First Place in the State Level Online Coding Contest "Debug Your Lockdown" HACK-2020, conducted by ISTE Karnataka Section.

Indian Society for Technical Education (ISTE), Karnataka Section had organized this prestigious event completely online, by conducting multiple rounds of Online Programming Tests on the popular online development platform HackerRank. Mr Winston went onto bag first place under Category 2 that was meant for 3rd and 4th year BE students.



Getting Connected to the Grassroots...

COMMUNITY ENGAGEMENT ACTIVITIES

SJEC has adopted five GramPanchayaths to provide an opportunity for the students to collaborate with the society, understand the needs of the society and develop technical solutions.

The following are the GramPanchayaths:

1. Hosabettu
2. Malluru
3. Ammunje
4. Navooru
5. Beluvai

Community Initiatives

Care Pachanady initiative to ensure scientific waste management practices by Mangaluru City Corporation with focus on health and environment hazards faced by people in Pachanady and surrounding localities.



Helping the flood Victims by items and fund collection.



Outreach programme to St Michel Higher Primary school at Ammunje.



Go Green initiative.



Helping the residents of Neermarga Grama Panchayat by providing groceries and food items during COVID-19 pandemic.



Helping the distressed street vendors by distribution of rice and groceries during COVID-19 pandemic.



Helping the residents of Mallur Grama Panchayat by providing groceries and food items during COVID-19 pandemic.



Helping the distressed street vendors by distribution of rice and groceries during COVID-19 pandemic.

Service brings Fulfilment!

NATIONAL SERVICE SCHEME (NSS)

The National Service Scheme (NSS) is a Central Sector Scheme of Government of India, Ministry of Youth Affairs & Sports. It provides opportunity to the student youth of 11th and 12th Class of schools and student youth of Technical Institution, Graduate & Post Graduate at colleges and University level of India to take part in various government led community service activities and programmes. The sole aim of the NSS is to



provide hands on experience to young students in delivering community service.



At SJEC, The NSS club along with the Youth Red cross organizes a number of events to serve the community. Planting of the sapling, Swachatha Abhiyan, Flood relief funds and Annual NSS Camps are some of the activities conducted by the club.

THE NATIONAL CADET CORPS (NCC)

SJEC has Air Wing and Naval Wing Unit of NCC. The National Cadet Corps (NCC) is a youth development movement. The NCC provides opportunities to the youth of the country for their all-round development with a sense of Duty, Commitment, Dedication, Discipline and Moral Values so that they become able leaders and useful citizens. The NCC provides exposure to the cadets in a wide range of activities with a distinct emphasis on Social Services, Discipline and Adventure Training.



Aim of NCC:

- To develop character, commandership, discipline , leadership, secular outlook , spirit of adventure and the ideals of selfless service amongst the youth of the country.
- To create a human resource of organized, trained and motivate youth to provide leadership in all walks of life and always available for the service of the nation.
- To provide a suitable environment to motivate the youth to take up a career in the Armed Forces.

Motto of NCC
"Unity and Discipline"

Benefits of NCC:

- Opportunity to attend many National level camps.
- NCC "C" certificate holder has an advantage in the Recruitment drive held by the services.

Facilitating Success...

SIGNIFICANT FEATURES

CO-CURRICULAR AND EXTRACURRICULAR ACTIVITIES

For the all round personality development of students, the college provides forums like; NSS, Red Cross, AICUF, Human Rights Club,& Departmental Associations like EELS, IEEE, Prodigy, Genesis, Cipher, ISTE, Torque, Intaglio, Technocrats, Industry Interaction Cell, Innovation Club, Entrepreneurship Dev. Cell, Gavel Club, Nirman and Sigmaths.

HOSTELS

SJEC hostels are a second home for more than 850 students. The hostels are secure and comfortable residential complexes, with a wide array of amenities, aimed at providing students with an

ambiance that is conducive for academics and self-growth.

AC and Non-AC hostels, with single and multi-occupancies, are available for both boys and girls. The hostels have exclusive study halls, indoor sports facilities, and well-equipped gymnasiums. The hostels serve nutritious food and have both vegetarian and non-vegetarian mess halls. The hostel blocks are equipped with wifi facilities and students have access to the internet for all their needs. Laundry facilities are also arranged in-house for students. The hostels are managed by teams of Warden and Assistant Wardens who reside in the hostels.

DISPENSARY AND COUNSELING CENTRE

The Counselling services in St Joseph Engineering College are a part of the academic requirements of VTU-Belgaum.

The College houses a well-equipped Dispensary to attend to the medical needs of students, staff, and all other inmates of the Campus. A Campus Doctor is available round the Clock and resides in the Campus. The Dispensary houses a Consultation Room, Treatment Room, and Nursing Counter. Nursing staff are available round the clock to attend to all requirements of Campus inmates.

All hospitalization cases are referred to Father Muller Medical College and Hospital, a Sister Concern of the College.





TRANSPORT FACILITY

The College provides bus facilities for the students with a fleet of well maintained buses which ply to and from Puttur, Kinnigoli, Alangar, Deralakatte and Mangaluru City.

VEG AND NON-VEG CAFETERIAS

The canteen at SJEC is known for its student friendly environment. It provides a wide variety of delicacies to cater to the tastes of each individual. There are separate sections for vegetarians and non-vegetarians. It can accommodate nearly 250 students at a time.

CENTRAL COMPUTER CENTRE

The Central Computer Center (CCC) is the nerve center of campus wide network. The Department has a wide combination of high configured equipment's to distribute the internet effectively and securely throughout the campus. The Department possesses 500 Mbps leased line support at its core to distribute the quality bandwidth to the users in the campus. CCC provides facilities for internet browsing, basic computing etc. Around 100 high

configured Wi-Fi devices are used to distribute the internet remotely to the users along with the wired connections. The Department also provides the services, to the campus surveillance system by using around 200 CCTV cameras synchronized with high definition storages.

BANK

The campus houses a branch of Oriental Bank of Commerce for the banking needs of students, faculty and the institution.

STATIONERY CENTRE

A well equipped stationery shop is present in the campus to meet the needs of everyone in the campus.

CAMPUS CHAPEL

The campus houses St Pio Chapel to meet the spiritual needs of the campus inhabitants.



A Plethora of Opportunities!

SJEC STUDENT CLUBS / CHAPTERS

TECHNICAL / SOCIAL CLUBS



SJEC Alumni Association



**Automation and
Robotics Club**



**Institute of Electrical and
Electronics Engineers**



**All India Catholic
University Federation**



**SAEINDIA -SJEC
COLLEGIATE CLUB**



**Imperial Society of
Innovative Engineers
Collegiate Club**



**National Service Scheme
& Youth Red Cross**



**Committee for Prevention
of Sexual Harassment**



**Indian Society for
Technical Education**

DEPARTMENTAL STUDENT ASSOCIATIONS



TORQUE
Mechanical Engineering



CIPHER
Computer Science & Engineering



NIRMAN
Civil Engineering



EELS
Electrical & Electronics
Engineering



GENESIS
MBA



PRODIGI
Electronics & Communication
Engineering

TechnoCrats

TechnoCrats
MCA



Epsilon
Physics



ChemAtom
Chemistry



Sigmaths
Mathematics

Life @ SJEC





Josarena - Amphitheatre

VTU Rank Holders 2019-20



Diona D'Silva

1st Rank

MCA

& 3 Gold Medals



Pooja L

5th Rank

Civil Engineering



Laulita Miranda

4th Rank

**Electrical & Electronics
Engineering**



Swathi B N

10th Rank

MCA



Jahnavi U Mulki

10th Rank

Civil Engineering



ST JOSEPH ENGINEERING COLLEGE

An Autonomous Institution

Affiliated to VTU, Belagavi | Recognised by AICTE, New Delhi | Accredited by NAAC with A+ Grade
B.E. - CSE, ECE, EEE, ME Accredited by NBA, New Delhi

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