

# **NEWS LETTER (ODD SEMESTER 2020-21)**

#### **VISION**

To make the institution one of our nation engineering schools, great recognized nationally and internationally for excellence in teaching, research and public service. We seek to be the preferred destination for students, practitioners engineering seeking an education, employers hiring engineering graduates organizations and seeking engineering knowledge.

#### **MISSION**

To Provide an encouraging environment to develop the intellectual capacity, critical thinking, creativity and problem-solving ability of the students.



### **DEPARTMENT OF INFORMATION**

#### ABOUT THE DEPARTMENT

The Department of Information Technology was established in 2006 with the objective of imparting quality education in the field of Information Technology. Since its inception, the department has expanded and grown in terms of dissemination of knowledge within and outside curriculum and skill development activities.

#### **Vision of the Department:**

The Information Technology Department will be a recognized center of excellence in creating engineers for ever changing technologies of Information Technology and IT Enabled service industries.

Mission No. Mission Statements

M1 Create learning environment for students to gain core knowledge in the field of Information Technology

M2 Provide opportunities to acquire knowledge in various tools and programming languages by the way of self-learning

M3 Solve engineering problems for the betterment of mankind and technology as part of lifelong learning



#### PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- 1. To ensure graduates will be proficient in utilizing the fundamental knowledge of basic sciences, mathematics and Information Technology for the applications relevant to various streams of Engineering and Technology.
- 2. To enrich graduates with the core competencies necessary for applying knowledge of computers and

Telecommunications equipment to store, retrieve, transmit, manipulate and analyze data in the context of business enterprise.

- 3. To enable graduates to think logically, pursue lifelong learning and will have the capacity to understand technical issues related to computing systems and to design optimal solutions.
- 4. To enable graduates to develop hardware and software systems by understanding the importance of social, business and environmental needs in the human context.



#### PROGRAM OUTCOMES (POs)

Engineering graduates will be able to:

- 1. Engineering knowledge: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.
- 2. Problem analysis: Identify, formulate, review research literature, and analyse complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.
- 3. Design/development of solutions: Design solutions for complex engineering problems and design system components or processes that meet the specified needs with appropriate consideration for the public health and safety, and the cultural, societal, and environmental considerations.
- 4. Conduct investigations of complex problems: Use research-based knowledge and research methods including design of experiments, analysis and interpretation of data, and synthesis of the information to provide valid conclusions.
- 5. Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.



- 6. The engineer and society: Apply reasoning informed by the contextual knowledge to assess societal, health, safety, legal and cultural issues and the consequent responsibilities relevant to the professional engineering practice.
- 7. Environment and sustainability: Understand the impact of the professional engineering solutions in societal and environmental contexts, and demonstrate the knowledge of, and need for sustainable development.
- 8. Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.
- 9. Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.
- 10. Communication: Communicate effectively on complex engineering activities with the engineering community and with society at large, such as, being able to comprehend and write effective reports and design documentation, make effective presentations, and give and receive clear instructions.
- 11. Project management and finance: Demonstrate knowledge and understanding of the engineering and management principles and apply these to one 's own work, as a member and leader in a team, to manage projects and in multidisciplinary environments.
- 12. Life-long learning: Recognize the need for, and have the preparation and ability to engage in independent and life- long learning in the broadest context of technological change



#### PROGRAM SPECIFIC OBJECTIVES (PSOs)

- 1. Professional Skills: To create, select, and apply appropriate techniques, resources, modern engineering and IT tools including prediction and modelling to complex engineering activities with an understanding of the limitations.
- 2. Problem Solving Skills: To manage complex IT projects with consideration of the human, financial, ethical and environmental factors and an understanding of risk management processes, and operational and policy implications.
- 3. Career and Entrepreneurship: The ability to employ recent technologies, programming languages, and platforms.



I have always been inspired by Dr. Martin Luther King's statement,I have a dream - a dream I believe will come true - a dream that my children will one day live in a world where they will not be judged by the colour of their skin, but by the content of their character'. This need for tolerance - to create an equal society with no discrimination in Caste, Creed or Colour was best exemplified in the words of Mahatma Gandhi quote;I do not want my institution to be walled off on all sides, I want the culture of all lands to be blown about my institution as freely as possible. But I refuse to be blown off my any



one of them. Mine is not a religion of the prison house. It has room for the least among God's creations but it is proof against insolent pride of race, religion or colour &quote; And this I believe will be the watchword of each and every Shakthian. The vision for Sri Shakthi is to make the institution one of our nations great engineering schools, recognized nationally and internationally for excellence in teaching, research and public service. We seek to be the preferred destination for students, practitioners seeking an engineering education, employers hiring engineering graduates and organizations seeking engineering knowledge.

Dr. S. Thangavelu, Chairman

SRI SHAKTHI INSTITUTE OF ENGINEERING AND TECHNOLOGY



#### **MESSAGE FROM PRINCIPAL**

Sri Shakthi Institute of Engineering and Technology (SSIET) was established in the year 2006 with approval of All India Council for Technical Education (AICTE), New Delhi, and is affiliated to Anna University, Chennai. The primary vision of the institute is to impart technical knowledge and skills to the students in accordance with the needs of the industry by producing technologically superior and ethically strong engineers to transform life as a whole. The College offers 10 UG courses leading to B.E and B.Tech degrees and also 5 PG courses leading to M.E degrees. The College has well qualified, experienced and dedicated faculty and supporting staff, state-of-the art laboratory and workshop facilities, computer facilities, library and information center, outdoor and indoor games, air conditioned



seminar hall and round the clock Internet facilities & Dampis separate hostels for Boys and Girls on campus. It is a matter of great pleasure and pride that the college is providing an excellent quality of education and mentoring for the students, aspiring to be competent professionals in engineering and technology. Ever since its establishment, the SSIET conglomerate of students, staff and faculty have endeavored towards creating young and dynamic engineers who will form the crux of the technical workforce of tomorrow. The college provides facilities to students to take part in co-curricular and extracurricular activities. There is an active National Service Scheme (NSS) unit which organizes several programmers related to social service. Different societies and and various clubs at the institute is used to inculcate not only the love for social service, discipline, compassion for nature, agility and awareness for ones rights and duties, but also make them good human beings and confident leaders. The College encourages faculty members through incentives and sops to acquire higher degrees, to publish text books/papers and participate in Seminar / Workshop / Conferences that are held not only within our country but also abroad.



With student strength of more than two thousand at SIET, our efforts are directed to accommodate and address the expectations of every student by the way of enabling them to participate in seminars, workshops in and out of the Institute, apart from educational tours and industrial project works. The College has a full-fledged Placement and Training ((PAT) Centre. This Centre organizes several training programmes related to development of soft skills to our college students. It has enabled our college students to participate in several recruitment programmes of several leading organizations.

With all good wishes

Dr. AR. Ravikumar,

Principal, SIET



#### **MESSAGE FROM HOD**

I am delighted to meet you through this page. Education is not only an act of acquiring knowledge but learning skill to lead life and grooming ones' personality. Education of the highest order aims at guiding, inspiring, motivating, and leading young men and women to become successful leaders to serve the country better. Research is the key parameter to promote the individuality to horizon. In order to create the best engineers, the college has been providing environment to enhance the research activities even from the budding student engineers since its origin.

Dr.S.PRAKASH,

HOD/IT, SIET





At Sri Shakthi Institute of engineering and technology, Department of IT Organized a Seminar on 14/07/2020. The webinar was on the topic Campus Recruitment,it was presented by Mr.VenkatRaman, Tessolve Semiconductors,





At Sri Shakthi Institute of engineering and technology, Department of IT Organized a webinar on 25.09.20. Webinar on the topic of Laptop services and it was presented by Mr. Sathish, New Technologies Coimbatore.

In our Department we Organized a guest lecture on 18-08-2020. The Guest lecture was presented on the topic on Technical Talk Job market in core Industries and it was presented by Mr. Aravind Govindaraj, hr-Manger Utl Technologies.

## Technology trends and underlying technologies

Industry-agnostic trends



Next-level process automation...

Industrial IoT<sup>1</sup>

Robots/cobots<sup>2</sup>/RPA<sup>3</sup>



... and process virtualization

Digital twins

3-D/4-D printing



2 Future of connectivity

5G and IoT connectivity



4 Next-generation computing

Quantum computing Neuromorphic chips (ASICs<sup>4</sup>)



5 Applied Al

Computer vision, natural-language processing, and speech technology



6 Future of programming

Software 2.0