

SITA-RA

Students of Information Technology's Association- Research & Analytics

The IT Department Technical Magazine
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Hon. Chairman



Dr. Sandip Kumar Jha

Sandip Foundation was established in 2005 with a vision of creating an education system from which the leaders of tomorrow emerge. Since our inception we have been aware of our strengths, motives and goals which we have set out to achieve.

When we embarked on this journey, all we had was a dream and the tools of foresight and strategy. We combined these forces to pave a path of growth towards excellence and merit.

Today it is our Endeavour to be the most competitive institution in the country with emphasis on efficiency in everyday operations, reliability for students and thrust on discovery and development of new technologies.

We are an organization that combines the latest developments in the field of education with our scientific and operational skills to create an environment which nurtures and encourages the aspirations of students. It is our aim that the combination of these factors along with the state of the art infrastructure and a dedicated teaching staff will provide an impetus to the Indian educational system as a whole.

Our first campus is set up at Nashik, Maharashtra where the college building is spread across a 200 acre area. Keeping pace with the times, the campus is Wi-Fi enabled. To ensure the complete educational experience, laboratories with the latest tools and machinery are provided along with a comprehensive library with RFID technology, a computer centre with complete internet connectivity a wholesome cafeteria, all set up in a green environment to give our students the most healthy and pleasant experience as they embark and pursue their professional goals.

What does an International quality Education system consist of? That is the question we asked ourselves when we set out to build this Foundation. India as a country has no problem with

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unemployment but there are institutions which churn out a large number of unemployable students. Should we consider ourselves an exception to this? The search for the answer has resulted in the faculty and staff to come up with innovative methods in teaching to construct new knowledge in the classroom. Our motto is to always give our students the best of what is happening in and around so that they are always at the cutting edge of academics the world over. The cultural aspect has always been a strong-point of our College as it has an acknowledged role in moulding the personality, teaching soft-skills, developing leadership and management abilities and strengthening the EQ. Extra-curricular activities, participation in sports and other cultural activities has now become universal contributing to all-round formation which is much needed in the world today.

Finally we look to create an Alumnus for inspiration and support so that our students have wonderful role models to emulate. Our faculty and students remain focused on a quality of education that is not just a college degree but a way of life.

Dr. Sandip Kumar Jha
Chairman , Sandip Foundation.

Infrastructure



From Principal's Desk



It gives me immense pleasure to welcome you to Sandip Foundation's SITRC. Our aim is to impart top-quality technical and managerial education in a multicultural environment with the best facilities and a dedicated teaching staff to bring you the best of knowledge.

Modern Infrastructure, an exemplary set of dedicated teaching professional and the exhilarating atmosphere of the campus will surely take you to enviable heights in your intellectual development and help you to achieve your future endeavors. To impart training we have a team of individuals with in-depth knowledge and industrial experience in the latest technical fields. Our sole purpose is to develop high quality technical personnel with sound knowledge I basic engineering and managerial principles who are able to adapt themselves to the ever changing business environment along with the highest ethical and moral values.

The aim behind all our co-curricular and extra-curricular activities is to provide an impetus for young minds to explore other possibilities while they pursue their individual disciplines. It is our belief that education should not be bound. Only then will our students reach their pinnacle of talent and passion. Our focus will always remain on raising efficient, confident and highly knowledgeable engineers, managers and entrepreneurs with global thinking and a futuristic mind set. I expect all my students to have a champion's attitude and an unquenchable thirst for knowledge.

At SITRC we will give you the power to dream, to aspire and to soar towards what you define as success. Let the sky be the limit.

Dr. Milind M. Patil
Principal



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Sandip Institute of Technology and Research Centre, Nashik



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From HOD's Desk

Department of Information Technology was established in 2008 with an intake of 60 students. The aim of the department is to establish a state of the art knowledge centre in Information Technology Research which produces engineers imbued with the spirit of professionalism and responsible citizenship. The department has well – equipped laboratories, highly qualified and experienced and devoted team of teaching faculty members. Conductive learning environment exists in the department for both students and staff. High-quality technical education keeping in mind the industrial requirement is provided to the students in the areas of Information Technology in order to meet the challenges of the industries. The department caters to the needs of Information Technology sector by imparting a requisite knowledge to the students, in the field of software development, Information Technology and Software Testing, Software Engineering, Computer Networks, Mobile Computing and many advanced topics. Since inception, the department has made tremendous progress in terms of good academic result and student placement in software industries and also staff development. The IT Department established a Student's of IT Association(SITA), since the establishment in 2014 and organizes various technical, non-technical, and cultural events through it.

Our Strengths – Information Technology

- Persistent Infrastructure Development
- Full Fledged Software Support
- Conducive Environment for Academic Excellence
- Effective Teaching and Learning Process
- Active Placement assistant
- Excellent Departmental Library
- Subscription to Online Journals
- ISTE, IEI, IEEE and CSI Student Professional Bodies
- Strong Alumni Association
- Student's of IT Association (SITA)

Dr. Vivek Waghmare
HOD, Department of Information Technology



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TECHNOLOGY AND RESEARCH CENTRE, NASHIK**

Approved by AICTE, New Delhi & Govt. Of Maharashtra
Permanently Affiliated to Savitribai Phule Pune University, Pune

**SANDIP
FOUNDATION**

INSTITUTE

DEPARTMENT OF INFORMATION TECHNOLOGY

VISION

- » To be acclaimed institution for learning and research.
- » To be a renowned academic department for education and research in the domain of Information Technology.

MISSION

- » To impart in-depth technical knowledge.
- » To create conducive environment for research, innovation and entrepreneurship.
- » To instill the social and cultural values.
- » To impart quality technical education and accomplish superiority in education and research.
- » To produce competent IT professionals and entrepreneurs with professional ethics.
- » To promote and develop an ability to apply the knowledge for the societal benefits.



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DEPARTMENT OF INFORMATION TECHNOLOGY

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- PEO 1:** Possess strong fundamental concepts in mathematics, science, engineering and Technology to address technological challenges.
- PEO 2:** Possess knowledge and skills in the field of Computer Science and Information Technology for analyzing, designing and implementing complex engineering problems of any domain with innovative approaches.
- PEO 3:** Possess an attitude and aptitude for research, entrepreneurship and higher studies in the field of Computer Science and Information Technology.
- PEO 4:** Have commitment to ethical practices, societal contributions through communities and life-long learning.
- PEO 5:** Possess better communication, presentation, time management and teamwork skills leading to responsible & competent professionals and will be able to address challenges in the field of IT at global level.

PROGRAM OUTCOMES (POs)

- PO 1 - Engineering Knowledge :** An ability to apply knowledge of mathematics, computing, science, engineering and technology.
- PO 2 - Problem Analysis :** An ability to define a problem and provide a systematic solution with the help of conducting experiments, analyzing the problem and interpreting the data.
- PO 3 - Design / Development of Solutions :** An ability to design, implement, and evaluate a software or a software/hardware system, component, or process to meet desired needs within realistic constraints.
- PO 4 - Conduct Investigations of Complex Problems :** An ability to identify, formulates, and provides systematic solutions to complex engineering/Technology problems.
- PO 5 - Modern Tool Usage :** An ability to use the techniques, skills, and modern engineering technology tools, standard processes necessary for practice as a IT professional.
- PO 6 - The Engineer and Society :** An ability to apply mathematical foundations, algorithmic principles, and computer science theory in the modeling and design of computer-based systems with necessary constraints and assumptions.
- PO 7 - Environment and Sustainability :** An ability to analyze and provide solution for the local and global impact of information technology on individuals, organizations and society.
- PO 8 - Ethics :** An ability to understand professional, ethical, legal, security and social issues and responsibilities.
- PO 9 - Individual and Team Work :** An ability to function effectively as an individual or as a team member to accomplish a desired goal(s).
- PO 10 - Communication :** An ability to engage in life-long learning and continuing professional development to cope up with fast changes in the technologies/tools with the help of electives, professional organizations and extra-curricular activities.
- PO 11 - Project Management and Finance :** An ability to communicate effectively in engineering community at large by means of effective presentations, report writing, paper publications, demonstrations.
- PO 12 - Life - Long Learning :** An ability to understand engineering, management, financial aspects, performance, optimizations and time complexity necessary for professional practice.

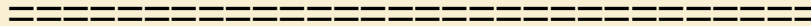
PROGRAM SPECIFIC OUTCOMES (PSOs)

- PSO 1:** An ability to apply the theoretical concepts and practical knowledge of Information Technology in analysis, design, development and management of information processing systems and applications in the interdisciplinary domain.
- PSO 2:** An ability to analyze a problem, and identify and define the computing infrastructure and operations requirements appropriate to its solution. IT graduates should be able to work on large-scale computing systems.
- PSO 3:** An understanding of professional, business and business processes, ethical, legal, security and social issues and responsibilities.
- PSO 4:** Practice communication and decision-making skills through the use of appropriate technology and be ready for professional responsibilities.



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Students of Information Technology Association (SITA)

A.Y. 2022-23

Semester I

Objective of SITA is to provide a platform for the students of Dept. to exhibit their talents and learn things beyond the curriculum. SITA organizes various programs for the overall personality development of students. SITA also publishes **SITAपत्र**, A newsletter and **SITA-RA** (SITA-Research & Analytics), technical magazine, for motivating students in research publication. SITARA organized many events since its establishment, listed below are the few events within the span of assessment Period. Some Prominent Events are as follows:

Department of Information Technology conducted the session on Resume Writing on 27th Aug. 2022. Students of BE IT were present for this event.

Department of Information Technology conducted the session on “Industry Readiness and Journey of Project to Product” on 17th Sep. 2022. Students of BE IT were present for this event.

Dr. V. N. Waghmare, “Weighted Hashing-Based Capture Text Similarity Estimation with the Cross-Media Semantic Leve” IJISAE, ISSN 2147-6799, 19-Dec-22



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Student Association Details

The IT Department Successfully runs various Students' Chapters through its Students of IT Association (SITA), since the establishment in 2014. The department has the following four professional student's chapters, which provide a good platform for students to participate actively in the various competitions and lectures.

Students of Information Technology's Association (SITA)

A student of Information Technology's Association (SITA) is an organization formed by the students of IT with the help and guidance of Faculties of IT. SITA works for the students as well as faculties. The basic aim of SITA is to enrich students with different qualities to add dimensions to their personality so that every student emerges as multi-functional engineer who is globally recognized. SITA was established in the Academic year 2014-2015. The objective of SITA is to mold one's personality in such a way that one becomes equally competent in all streams of engineering. In the recent years SITA has been working hard to press the students towards the zenith of developing them in a versatile polymath fashion.

The Governing body is formed of the faculty and students. The president of SITA is the Head of the Department. A Faculty Advisor and Co-In charge of SITA is one of the senior faculties from the department. Bright and dynamic students from final Year are selected for the post of Student President, Vice- President and Treasurer by interviewing them. Executive Members (one from each division) and Ladies Representatives (one from each class) are selected by each class.

Objectives:

Objective of SITA is to provide a platform for the students of Dept. to exhibit their talents and learn things beyond the curriculum. SITA organizes various programs for the overall personality development of students. SITA also publishes SITAपत्र a newsletter and SITA-RA (SITA-Research & Analytics) a technical magazine, for motivating students in research publication.



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Committee of A.Y. 2022-23

Sr. No.	Academic year	Name of the Team Members	Designation
1	2022-2023	Niraj Kathe	President
2		Prashant Gawali	Vice President
3		Ketan Dhole	Treasurer
4		Preeti Kawade	Secretary

Editor: Prof. Sneha Khaire,
Assistant Professor, Department of Information Technology,
Sandip Institute of Technology and Research Centre, Nashik

Publisher: Department of Information Technology,
Sandip Institute of Technology and Research Centre, Nashik

SITA-RA

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From The Desk of HOD

Department of Information Technology was decided to provide a platform for students and faculty to publish their technical reviews, papers, and findings through the active involvement of its students association SITA. Here is the official technical magazine of IT Department helping the students and faculties to enhance their technical writing skills by publishing their research articles, reviews, and notes on beyond syllabus to boost their academic performance through the technical magazine SITA-RA. All the entries coming to SITA-RA are checked by Department's senior professors for content and plagiarism. Students of Information Technology's Association-Research Analytics (SITA-RA) received more than 8 entries, only 3 were selected and published in the Semester I issue of AY 2022-23. SITA-RA get published in every academic Year in May for odd Semester, and December for Even Semester.

Students enthusiastically proposed and designed the SITA-RA under the guidance of Faculty coordinator of SITA. I Congratulate all the participants, organizers, and SITA members for the publication of SITA-RA.

Dr. V Waghmare
HOD IT

From The Desk of SITA-RA Executive Editor

Students of Information Technology's Association (SITA) was formed to boost and motivate the Students and Faculties of the Information Technology to conduct and participate in various technical, recreational, social, cultural and sport activities. SITA, since its formation decided to publish a technical magazine to publish the technical reviews, papers, and e-notes of students and faculties of the department.

The **SITA-RA** magazine is outcome of efforts and dedication of students and respected faculties, being an editor for the same I congratulate all my students and respected faculties for successfully completing the SITA-RA issue of Semester I of Academic Year 2022-23. I invite them all to go through the published articles and submit their own accordingly for the next issue. I thanks all SITA members, IT Faculties, and HOD IT for their continuous support to me and my team members in designing and publishing this technical magazine of AY 2022-23, Semester-I, Dept. of Information technology.

Prof. Sneha Khaire
Executive Editor, **SITA-RA**