



Tech Tonics

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TECH TONICS: TIMSCDR Student Research Journal

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AIM

The research and development is transforming the computing paradigms and technology in multidimensional directions. Tech Tonics aims to inculcate research culture among post graduate students and make them aware of new innovations happenings in the field of information technology.

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Vision

Thakur Institute of Management Studies, Career Development & Research will become a premier institute renowned internationally for providing education in software application to graduates from various disciplines.

Mission

To achieve excellence in providing software education so that students can grasp existing as well as emerging technologies and to inculcate leadership and managerial qualities in them so that they can deliver results in the organization they join.

Educational Organization Policy

We, the staff, faculty and management of Thakur Institute of Management Studies, Career Development and Research are committed to offer excellence in software education, in inclusive and conducive academic environment for holistic development of our students.

We work as a team and interact with students in proactive manner to achieve our Educational Organization Objectives and fulfill all academic, statutory and regulatory requirements. We strive for continual improvement of our Educational Organizations Management System.

PROGRAM EDUCATIONAL OBJECTIVES (PEOs)

- **PEO-1:** To enable students to gain knowledge across all domains of Information Technology with in-depth understanding of their applications.
- **PEO-2:** To enable students to analyze problems and to design and develop software solutions using emerging tools and technologies.
- **PEO-3:** To enable students to continue Life-long learning, Research and Entrepreneurial pursuit in their chosen fields.
- **PEO-4:** To develop communication, teamwork, and leadership skills necessary to manage multidisciplinary projects and serve the society as responsible and ethical software professionals.

PROGRAM OUTCOMES (POs)

- PO1 **Foundation Knowledge:** Apply knowledge of mathematics, programming logic and coding fundamentals for solution architecture and problem solving.
- PO2 **Problem Analysis:** Identify, review, formulate and analyse problems for primarily focusing on customer requirements using critical thinking frameworks.
- PO3 **Development of Solutions:** Design, develop and investigate problems with as an innovative approach for solutions incorporating ESG/SDG goals.
- PO4 **Modern Tool Usage:** Select, adapt and apply modern computational tools such as development of algorithms with an understanding of the limitations including human biases.
- PO5 **Individual and Teamwork:** Function and communicate effectively as an individual or a team leader in diverse and multidisciplinary groups. Use methodologies such as agile.
- PO6 **Project Management and Finance:** Use the principles of project management such as scheduling, work breakdown structure and be conversant with the principles of Finance for profitable project management.
- PO7 **Ethics:** Commit to professional ethics in managing software projects with financial aspects. Learn to use new technologies for cyber security and insulate customers from malware.
- PO8 **Life-long learning:** Change management skills and the ability to learn, keep up with contemporary technologies and ways of working.

Editorial

The volume twentieth of the Institute Research Journal, Tech Tonics 20 is a compilation

of scholarly research papers and articles written by students of MCA (Master of

Computer Applications) course of TIMSCDR. The contents of the research papers and

articles of this edition pertain to the application of Information Technology in various

domains such as Agriculture, Medicine, Big Data, IoT, Digital Marketing etc.

The Journal showcases the research endeavors of Post Graduate level students in the area

of their interest. The students got an opportunity to understand the relevance of standard

research work through this academic exercise.

The twentieth edition of Tech Tonics, Research Journal is a modest effort to encourage

the young, enthusiastic, and resourceful minds of the students to do research using latest

techniques and innovate and pen down emerging ideas in the field of Information

Technology and its diverse Applications.

Editor-in-Chief

Dr. Vinita Gaikwad

Director, TIMSCDR

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