The Department of Computer Science & Engineering is one of the core Department of SIRT and was established in 2003 to initially offer Bachelor of Engineering degree in Computer Science & Engineering. Keeping in view the dynamic nature of growth in the industry and the increasing demand for IT professionals, later the Department has started a postgraduate program to offer Masters of Technology.

Vision

To motivate and mould students into world class Computer Science and Engineering professionals who will excel in their field and effectively meet challenges of the dynamic global scenario.

Mission

To achieve academic excellence in providing technical education by incorporating the principles of total quality management (TQM)

To provide state of art infrastructure for enhanced learning and research with IT based knowledge management to meet global challenges

To inculcate ethical , moral and cultural values among Computer Science and Engineering professionals

[STUDENT INNOVATION]

CSE undergrad start-up Inventohack is a revolution for field automation.

IT WILL HELP FARMER TO IMPLEMENT SMART AGRICULTURE PRACTICE

Inventohack, is an initiative which strives to bring advancement of IOT technology in the agriculture sector by advance, easy and quick soil analysis. They sought to provide detailed report of the soil by which farmer can easily know the soil nutrition and other essential parameters.

They're also working towards making organic products more affordable by creating automation practices that streamline and speed up the production process. **Inventohack** has taken on the challenge of testing and certifying soil and produce and deem them to be organic or not. They also work with farmers to help them implement smart agricultural practices to help them increase their yield of organic produce and crops.

Welcome Aseem : Founder of Inventohack Innovations Pvt ltd an agritech startup for field automation and Soil sensing support for farms and gardens. Digital supporting the like minded green products as BIOKIT to build a healthy sustainable Smart City !

Aseem Johri, student of CSE (VIII semester) founded Inventohack Innovations Pvt. Ltd. which developed an automation device called the Farmer Buddy.

A Message from the Department Chair

Established in 2003 as the Department of Computer Science & Engineering, we have an excellent & rich history and an outstanding record of contributions to the profession and community. The Department is well recognized for excellence in facilities and teaching.

At Present, the Department offers B.Tech. in Computer Science & Engineering and M. Tech. in Computer Science & Engineering.

The aim of these programmes is to enable students to acquire specialized knowledge for various subjects in computer science, as well as to enrich the students personal, social and cognitive development to meet challenges of today and tomorrow. The Department is well equipped with high end computers, latest software & state-of-the-art IT infrastructure and all these computing resources are inter-connected with high speed intranet. Our students are exposed to up-to-date curriculum, technology and techniques. The Department has well experienced & dedicated faculty members with different specializations. Our faculty is involved in cutting-edge research areas, including Machine learning, Data Science, Cloud Computing, computer networks and artificial intelligence. The Department prides itself on good career opportunities for students. Our students graduate with more than 100% placement through campus. Many companies of repute show their interest to visit our Institute for campus recruitment.

Yours,

Dr Rajesh K Shukla
Professor & Head

NATIONAL LEVEL CODING COMPETITION

Congratulations to all the students who have participated in this competition and won the first and second prize. Department of CSE is proud of all of you.

Kshitiz Shrivastava, Himanshu Dubey, Devika and Dheeraj under the Guidance of Dr. Vasima Khan won second prize of Rs 10, 000/- in the same competition.

Prashant Tiwari, Mayank Sahu and Prateek Bagre, students of CSE department as a team participated in Voidhack(); @SVVV Indore under the Guidance of Prof Ruchi Thakur and won the first prize of Rs 20,000/-
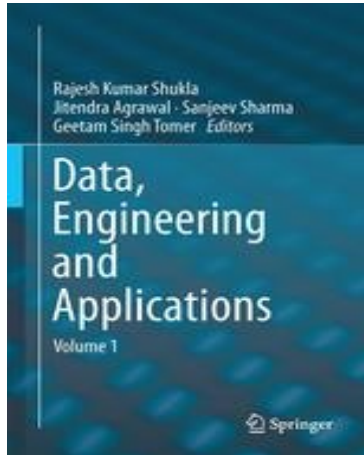
[STUDENT INNOVATION]

Team of 6 students of CSE along with faculty mentors Prof. Ruchi Thakur and Prof. Arun Jhapate participated in Smart India Hackathon (SIH-2019) at S.R.K.R Engineering College, Bhimavaram.

[BOOKS]

Books on "Data Engineering and Applications" by Dr. Rajesh K. Shukla and others is published by Springer in two volumes.

[AWARDS]

Prof. Brajesh Sharma received **Excellent Teacher Award** for achieving 100% result for the subject "Principle of Programming Language" taught to 6th Semester students.

Prof. Monika Kherajani also awarded by **Excellent Teacher Award** in SRIJAN2019 for attaining 100% result for the subject "Object Oriented Analysis & Design" taught to 8th Semester Class.

[ACHIEVEMENTS]

Prof. Mayank Kumar, one of the excellent faculty and very hardworking member of the Department cleared the UGC National Eligibility Test Dec 2018

[REVIEWERS]

Dr Rajesh K Shukla, Prof Arun Jhapate, Prof Ruchi Thakur, Prof Deepak Jain, Prof Mohit Signh Tomar, Prof Anjana Nigam, Prof Ankur Pandey, Dr Vasima Khan have served as Reviewer for Springer International Conference on Social Networking and Computational Intelligence (SCI-2k19) to be held at RGPV Bhopal in association with SIRT Bhopal on 08-09 March 2019

[EDITORS]

Prof. Ruchi Thakur and Prof. Arun Jhapate appointed as reviewer of the International Conference ICACSE 2019.

[CONFERENCE]

Dr. Vasima Khan, Prof. Ruchi Thakur, Prof. Rahul Jain, Prof. Mohit Tomar, Prof. Arun Jhapate, Prof. Mayank Namdev attended the Two Days International Conference on Social Networking and Computational Intelligence held at RGPV Bhopal on 08-09 March 2019.

[PAPER PRESENTATION]

Dr. Vasima Khan of CSE Department presented the Paper "Survey of Methods Applying Deep Learning to Distinguish between Computer Generated and Natural Images" in the Springer International Conference SCI2K19 held at RGPV Bhopal on 08-09 March 2019.

[PROGRAM OUTCOMES]

Engineering Graduates will be able to:

PO1: **Engineering knowledge**: Apply the knowledge of mathematics, science, engineering fundamentals, and an engineering specialization to the solution of complex engineering problems.

PO2: Problem analysis: Identify, formulate, review research literature, and analyze complex engineering problems reaching substantiated conclusions using first principles of mathematics, natural sciences, and engineering sciences.

PO3: **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.

PO4: 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.

PO5: Modern tool usage: Create, select, and apply appropriate techniques, resources, and modern engineering and IT tools including prediction and modeling to complex engineering activities with an understanding of the limitations.

PO6: 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.

PO7: 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.

PO8: Ethics: Apply ethical principles and commit to professional ethics and responsibilities and norms of the engineering practice.

PO9: Individual and team work: Function effectively as an individual, and as a member or leader in diverse teams, and in multidisciplinary settings.

PO10: **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.

PO11: **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.

PO12: **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 EDUCATIONAL OUTCOME]

PEO1: Graduates shall have fundamental and advanced knowledge in mathematics, science, Computer Engineering and inter disciplinary engineering to emerge as technocrats.

PEO2: Graduates shall have capabilities to develop software, understand the technical specification, design and provide innovative solutions for society by diligence, team work and lifelong learning.

PEO3: Graduate shall have good communication skill, leadership skill, professional and ethical values.

PEO4: To equip graduates with the ability to get employed in industries or pursue higher studies or turn as researchers or entrepreneurs.

[PROGRAM SPECIFIC OUTCOME]

PSO1: Demonstrate understanding of the principles and working of the hardware and software aspects of computer systems.

PSO2: Ability to understand the structure and development methodologies of software systems. Possess professional skills and knowledge of software design process. Familiarity and practical competence with a broad range of programming language and open source platforms.

PSO3: Ability to work in team and apply the knowledge acquired to develop new real life systems and able to adapt to societal needs of future.

[SUCCESS MYNTRA]

Aditi Jain
2015 Batch

Proper utilization of time is most important. So overcome the impact of mood as the wasted time never comes back.

Success is not a slave of wealth and approach. It comes from your hard work and determined preparation towards a goal.

Our past thoughts made our today, and our present thoughts will make our future. So always think positive and creative.

Just imagine that you have achieved what you desired for. It's in front of you. It acts as a catalyst for your mind, and you will get better ideas to materialize your imagination.

Dreams can be an enormous motivating factor for many people. dreams can boost your morale and push you to work harder. And if you learn to master your dreams, you may even be able to make them work for you.

[FACULTY EDITORS]
Prof. Arun Jhapate
Prof. Ruchi Thakur
Prof. Anjana Nigam

[STUDENT EDITORS]
Mayank Sahu
(CSE VI Sem)
Rishi Gupta
(CSE IV Sem)

Feel free to send news, photo, awards, achievements and other related content to: sirtcsenewsletter@gmail.com