



DAYANANDA SAGAR  
UNIVERSITY



SCHOOL OF  
ENGINEERING

## SOE - "The Weekly Buzz"

The Official Weekly Newsletter of **School of Engineering**



Week#32 (Aug 05 to 10, 2024)

[www.dsu.edu.in](http://www.dsu.edu.in)

# SCHOOL OF ENGINEERING

## VISION

- Transform lives through excellence in engineering education, research and innovation with an emphasis on sustainability, inclusive technologies and global needs.

## MISSION

- Design and deliver contemporary engineering curricula to address regional and global needs while emphasizing ethics, values, integrity and regional relevance.
- Carryout high impact academic research, industry projects and innovation activities with active student engagement to advance science and engineering knowledge and state-of-the art industry practices.
- Develop regional and national leaders to advance the society and economy.

# Partnership and collaboration with Industry

## Department of Computer Science & Technology

Department of CST, SoE- DSU has signed an MOU ceremony was formally held at the Boardroom, Ground Floor, Block A, School of Engineering, on 6th August 2024, 9:30 AM. The MoU was signed between Dayananda Sagar University and Namaskara Media Pvt. Ltd. This collaboration aims to enhance our efforts in promoting cutting-edge Technology Research and Development, particularly in the field of Animation, Visual Effects, Gaming, Comics (AVGC). Namaskara Media Private Ltd is a Customer-First Technology-Driven company where innovation and creativity thrive in entertainment and media production. It caters to advanced technology, creative innovation, effective communication, and exceptional support. The Virtual Production Namaskara Media Private Ltd have been associated with a vast clientele. Virtual Production and Training Centre specializes in Virtual design, Production, VFX, Unreal & Gaming providing comprehensive solutions that elevate creativity and enhance skills for students & Industry professionals.



# Faculty Contributions

## Department of CSE

- Prof. Sasikala N, Assistant Professor, Department of CSE, has participated in the One Week National level Online Faculty Development Program on Outcome Based Education and Application of Generative AI in Teaching and Research, organised jointly by The IQAC of Vasireddy Venkatadri Institute of Technology, Guntur, Andhra Pradesh and The IQAC of Siddaganga Institute Of Technology, Tumkur, Karnataka in association with ipsr solutions limited from July 24 to 31, 2024 and has successfully completed all the assessments and secured an A grade.
- Prof. Sasikala N, Assistant Professor, Department of CSE, has completed UdeMy certificate on the course “The complete python Bootcamp from Zero to Hero in Python” with 22 hours dated on 6th August 2024.
- Dr George Fernandez I, Associate professor, Department of CSE, extended his service as REVIEWER for 2nd IEEE International Conference on Networks, Multimedia and Information Technology (NMITCON) is organized at Nitte Meenakshi Institute of Technology, Bengaluru INDIA on 9th and 10th August 2024 in association with IEEE Bangalore Section.



## Department of CSE (Data Science)

Dr. U. Pavan Kumar, Assistant Professor, CSE (DS) Participation in the online Faculty Development Program on "Latest developments in RF Technologies in 5G and Beyond" Organized by Rajalakshmi Engineering College in association with IIC/REC and IEEE Communication society/REC between 31st July and 05th August 2024.



Prof. Shivamma D, Assistant Professor, CSE (DS) for successfully completing the course Introduction to Business Intelligence on 05th August 2024 Infosys Springboard.



# Department of CSE (Cyber Security)

- Dr. S.N. Prajwalasimha has contributed to a paper titled "2D-CRYPT: An efficient approach using Pixel Transposition and 2D-Logistic Map Based Substitution" which was presented on 9th International conference on ICT FOR SUSTAINABLE DEVELOPMENT, Goa, India on 8th and 9th August, 2024.
- Prof. P. Ranjima has successfully participated in IP Awareness/Training program under National Intellectual property awareness mission on August 06, 2024.
- Prof. V. Vinitha has successfully completed one week International Faculty Development Program on "AI for Sustainable Development" from 5th August 2024 to 9th August 2024, organized by VIIT, Pune, IEEE Region 10 Humanitarian Technology activities, IEEE Pune Section, IEEE Pune Section SIGHT group, IEEE Pune section SIG on "Energy and Environmental Engineering" and IEEE VIIT Student Branch.



## Department of CSE (AIML)

- Dr. Shreyas Rajendra Hole, Assistant Professor, Dept. of CSE (AI&ML) has attended and participated in one week Online International level FDP on “AI for Sustainable Development” from 5th August to 9 August, 2024, organized by VIIT Pune, IEEE Region 10 Humanitarian Technology Activities, IEEE Pune Section, IEEE Section SIGHT group, IEEE Power & Energy Society Pune Chapter SIG on "Energy and Environmental Engineering" and IEEE VIIT Student Branch.
- Prof Sriramkumar R, Assistant Professor, Dept. of CSE (AI&ML) has attended and participated in one week Online International level FDP on “AI for Sustainable Development” from 5th August to 9 August, 2024, organized by VIIT Pune, IEEE Region 10 Humanitarian Technology Activities, IEEE Pune Section, IEEE Section SIGHT group, IEEE Power & Energy Society Pune Chapter SIG on "Energy and Environmental Engineering" and IEEE VIIT Student Branch.
- Prof Sriramkumar R, is thanked for being a Editor for “International Journal of Computer Science and Mechatronics (IJCSM-2455-1910)”. Your consistent services for the research community will be encouraged and appreciated all the time. Looking forward to receive best writings and outcomes out of constant learning for the society.





# "8-Day Hands-On Training Program for Non-Teaching Staffs"

The Dept. of CSE has successfully completed a hands-on training program designed specifically for non-teaching staff members of CS cluster dept. An "8-Day Hands-On on Training Programme for Non-Teaching Staffs" held from 30th July to 08th August, 2024 was designed to equip participants with practical skills on the following topics:

- Data Structures using C
- Digital Logic Design with FPGAs
- Machine Learning using Python
- Operating Systems using C

## Objectives:

Gain practical insights into Data Structure, Digital logic Design, Machine Learning, and Operating Systems. 12 lab instructors from the CS cluster and ECE participated in the program and benefited from the training. I would also like to thank the resource persons for their effort in handling the sessions and faculty organizers Prof. Manoj Kumar and Prof. Santosh M to make the program successful.

**DAYANANDA SAGAR UNIVERSITY**  
 School of Engineering  
 Devaranagatagalli, Herohalli Kanakapura Road,  
 D. Kanakapura, Karnataka 562112

**Department of Computer Science & Engineering**

**8 Days Hands – on Training Programme for Non Teaching Staffs**  
**Program schedule**

**Date:** 30-07-2024 to 08-08-2024  
**Time:** 9:30 AM to 4:30 PM

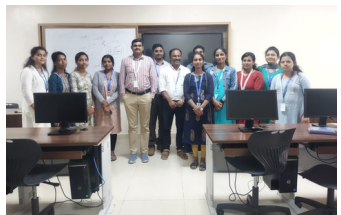
**Topics:**

- Data Structures using C
- Digital Logic Design with FPGAs
- Machine Learning using Python
- Operating Systems using C

**Co-ordinator:**  
**Dr Vidya Kumar Reddy KR**  
 Dean, SoE DSU  
 Dr Girish G S  
 Chairperson, CSE, DSE  
 Faculty co-ordinators  
**Prof. Manoj Kumar N I**  
 Asst Prof, CSE, SoE  
**Prof. Santosh M**  
 Asst Prof, CSE, SoE

Date	Topic	Resource Person
30-07-2024 & 31-07-2024	Data Structures using C	Dr. Aravindhan Gopin Dr. Ravi Kumar Rai Dr. Santosh Kumar Prof. Karanahalli J Purton
01-08-2024 & 02-08-2024	Digital Logic Design with FPGAs	Prof. Vidyan D B Prof. Sharanada D P Prof. Basappa Sankana. S
03-08-2024 & 04-08-2024	Machine Learning using Python	Dr. Y. Praveen Dr. Girish Thabirath Dr. Y. Girish Ms. Indu Anand Thangal Dr. Bindu Vaidyanathan
07-08-2024 & 08-08-2024	Operating Systems using C	Prof. Subramanya Prof. Praveen B Prof. Nandan K

**Registration link:**  
<https://forms.gle/4W9YU379W3Z8J8kL8>  
 E. Certificates will be provided for the participants.



# "Digital Signal Processing"

The Dept. of CSE has successfully completed training the students with value-added course on "Digital Signal Processing" from 01st to 07th August 2024 in online. The target audience were 3rd year CSE students.

This initiative was taken to establish a strong foundation in digital signal processing, setting the stage for studying advanced courses such as digital signal processing, computer vision, and others in later semesters.

Around 120+ students were registered & attended the course. All are trained on both theoretical and practical aspects of digital signal processing. At the end of the activity Feedback was taken from the students and all of them have given good feedback about the conduction of course.

I would also like to thank the resource persons Dr. Rajesh, Associate Professor, Dr. Renukadevi, Asst. Professor, Prof. Benaka Santosha, Asst. Professor for their effort in handling the sessions to make the event successful.

**BANARHINDU SARCAR UNIVERSITY**  
School of Engineering  
Devarakoppalhalli, Harohalli, Kanakapura Road, D.A. Ramnagara, Karnataka 562132

**Organizing**  
Value Added Course on:  
"Digital Signal Processing"

**Date & Time**  
01/08/2024 to 07/08/2024  
From 9:30 AM to 11:00 AM

**Target audience**  
3rd Year CSE students

**Coordinators:**  
Dr. Ramesh Kumar, M.B.A., B.E.  
Dr. Srinivas G. S.  
Chairpersons: E.N.E, BSE

**Resource Persons and Faculty Coordinators:**  
Dr. Rajesh T.R. Asst. Prof. CSE  
Dr. Renukadevi M.A, Asst. Prof. CSE  
Dr. Praveen Kulkarni, Asst. Prof. CSE  
Prof. Benaka Santosha, Asst. Prof. CSE

**Register through the QR or Scan the QR Code**

**Course Outline:**  
Module 1: Introduction to Signals and Systems  
Module 2: Behavior of continuous and discrete-time DT systems  
Module 3: Laplace Transformation (Theory and Math Implementation)  
Module 4: Fourier and z-Transforms  
Module 5: Sampling and Reconstruction

**Course Outcomes:**  
• To understand various signals like CT and DT, Apply Convolution to Image Processing.  
• To apply Fourier series for Periodic signal, Fourier Transform and Laplace Transform for Non-periodic signals.  
• Conversion of Signals from Time domain to Frequency domain.  
• Understanding Conversion of Analog signals to Digital and Inverse of Analog Signal.

**Examination:**  
Examination will be provided for the participants.

**Signals and systems overview**

**What is Signal?**

It is a representation of physical quantity (Sound, temperature, intensity, Pressure, etc.) which varies with respect to time or space or independent or dependent variable.

OR

It is a single valued function which carries information by means of Amplitude, Frequency and Phase.

**Example:** voice signal, video signal, signals on telephone wires etc.

$y(t) = A \sin(\omega t + \phi) = A \sin(\omega t + \phi_0)$

Where  $A$  = Peak Amplitude  
 $f$  = Frequency  
 $\omega$  = Angular Frequency  
 $\phi$  = Phase angle  
Angular Frequency =  $2\pi f$

The slide also features a graph of a sine wave and a list of participants in a Zoom meeting.

**Digital Signal Processing**

Dr. Rajesh T.R.  
Asst. Prof. CSE, S.E.C.E

The slide also features a list of participants in a Zoom meeting.

# Value Added Course on Programming in C# & .Net

In hybrid mode, a value-added course was conducted on “Programming in C# and .Net” for 5th Sem CST Students from 08/07/2024 to 05/08/2024.

## Course Objectives:

- Learn object-oriented programming
- Develop Console Applications
- Build Windows Applications that run on desktops
- Create database-connected applications

## Course Outcomes:

- Apply the concept of .Net Framework and C# language fundamentals.
- Evaluate the concept of C# OOPs and the .NET framework namespace contents.
- Develop the console and GUI applications using C# .Net .
- Analyze the c# assembly, thread, polymorphism, inheritance concept.
- Resource Person: Prof. Yashaswini Assistant Professor, CST.

SRM Institute of Science and Technology  
DEPARTMENT OF COMPUTER SCIENCE AND TECHNOLOGY

Cordially invites you to Value Added Course on  
"Programming in C# & .Net"

Target Audience: 4th Sem CST Students  
Hybrid Mode

**Objectives of the Course:**

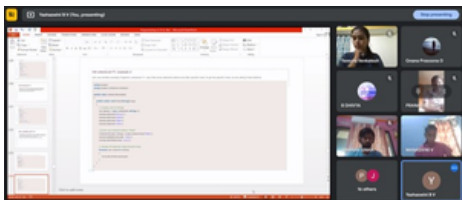
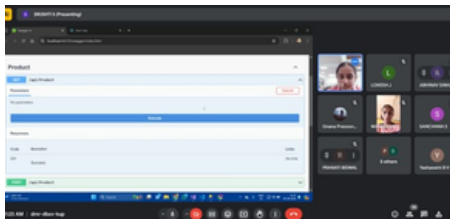
1. Learn object oriented programming
2. Console Applications
3. Windows Applications that run on desktops
4. Create database connected applications

**Outcomes of the Course:**

- Console application development using C#.Net.
- Windows application development using C#.Net

Online Session link: [meet.google.com/djwr-dbrv-kup](https://meet.google.com/djwr-dbrv-kup)

Resource Person  
Prof. Yashaswini B V



## Department of Library

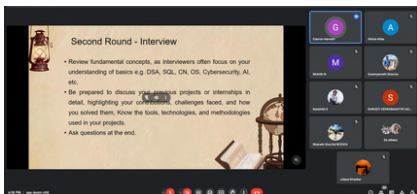
National Librarians' Day is observed on 12 August every year to commemorate the birth anniversary of Padmashri Dr. S. R. Ranganathan (1892-1972), who is considered as father of library science in India. Dr. Ranganathan dedicated his entire life to library profession in India leaving a rich legacy. On 132th birth anniversary of Dr. S. R. Ranganathan, the Library and Information Centre, DSU, SoE celebrated National Librarian's Day on 12th August 2024 at 12.45pm.



## Department of CSE (AI&ML)

The Department of Computer Science and Engineering (AI&ML) at Dayananda Sagar University hosted an online session on 11th August 2024, focusing on preparation for the EY GDS placement drive. Targeted at registered students and other interested 7th-semester students, the session featured Mr. Gaurav Kamath, AI&ML alumnus from the 2020-24 batch, who shared his experiences on succeeding in the EY GDS Campus Drive. Mr. Kamath's presentation, titled "Cracking the EY GDS Campus Drive: Preparation Tips for Success," covered essential aspects of the job description, including Data & Analytics, Oracle, and SAP offering detailed strategies for each section.

The session concluded with an interactive Q&A, where Mr. Kamath provided practical advice followed by a vote of thanks. The event was highly appreciated by participants and similar sessions are planned to support students in future placement preparations.



# Student Activities

## Department of CSE

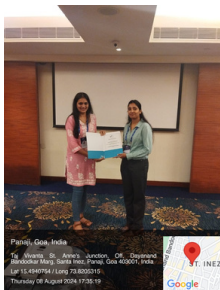
- Mr. Ayyavaraiah M (ENG17PPCS13), Research Scholar, Department of Computer Science and Engineering, under the guidance of Dr Bondu Venkateswarlu, completed his Ph.D. Defense VIVA-VOCE entitled “Predictive Analytics for Sar-Cov19 Incidence, Disease Severity, and Patient Mortality Using Machine Learning,” on August 10th, 2024, Lecture Hall 3, A Block, SOE, DSU, Harohalli, Bangalore.
- Antriksh Singh, Aditi Bharath, Aryanjeet Singh, Ashmita Neog, UG Scholars and Dr George Fernandez I, Associate Professor, Dept. CSE, School of Engineering, Dayananda Sagar University, Bengaluru, India, filled a patent with the title “SMART-SEGREGATION OF WASTE MANAGEMENT USING IOT” and the applicant name “Dayananda Sagar University” on 6th of August 2024.
- The Department of CSE participated in the 47th state level KSCST competitions at Sharanbasva University Kalaburagi on 9th and 10th of August 2024. Two teams of Final year student’s batches from CSE. under the guidance of Dr Basavaraj Hiremath and Prof Nandini K,



The two final year project teams from the Department of Computer Science and Engineering participated in the state level finals of the 47th series of KSCST at Sharanbasva University Kalaburagi.

## Department of CSE (CY)

- Aishwarya R Waghmare(ENG22CY002), Ashwini Jadhav(ENG22CY005), Sachin Pujappa Baluragi(ENG22CY020), has Contributed to A Paper Titled” 2D- CRYPT: An Efficient Approach Using Pixel Transposition & 2D-Logistic map based Substitution” which was presented on 9th International Conference On ICT for Sustainable Development, Goa, India On 8th & 9th August,2024.





**SCHOOL OF  
ENGINEERING**

**Edited by :  
Office of Dean SOE,  
Dayananda Sagar University  
Deverakaggalahalli, Kanakapura Road Ramanagara Dt.,  
Karnataka - 562 112**