S.A. ENGINEERING COLLEGE

(An Autonomous Institution Affiliated to Anna University Chennai)

Accredited by NAAC 'A' Grade & ISO 9001:2015 Certified Institution

INSTITUTION'S INNOVATION COUNCIL (Ministry of Education Initiative)

CAS IEEE CIRCUITS AND SYSTEMS SOCIETY

IEEE

Department of CSE (AIML), CSBS & ECE

In association with

IEEE Circuits And Systems Society (CASS) Madras Chapter

Organizes

IEEE Sponsored *One Week*
Professional Development Programme (PDP)

On

Accelerating AI - Driven Business Innovation : The Role of CPUs, GPUs, TPUs and NPUs

16 – 22 August 2024

About Institution

S. A. Engineering College was established by the Dharma Naidu Educational and Charitable Trust in the year 1998-99. The college is approved by AICTE and affiliated to Anna University, Chennai, Tamil Nadu. The college also acquired the Autonomous status in the year 2019-20. The college is well planned with 5 lakhs sq. ft of constructed area. The college maintains a high standard of Education by providing a world class academic facilities, employing highly qualified and experienced faculty members and creating an ambience conducive for quality education. In recognition of quality policy being implemented by the institution, M/s TUV NORD has accorded ISO 9001:2015 certification. The college is accredited by NAAC with 'A' Grade and NBA, The college offers 11 UG Programmes and 6 PG Programmes. S.A. Engineering College is also conferred Autonomous status for over 10 years from 2019. For more details, visit https://www.saec.ac.in/

About Department of CSE (AIML)

The Department of CSE (Artificial Intelligence and Machine Learning) was started in the year 2022. The department has grown to its current strength of 116 students from a humble beginning with 56 students. Our department is equipped with the latest state of the art laboratories and is equipped with an excellent Internet facility. We have a dedicated team of faculty members who will always counsel and motivate the students to bring out their best performance.We encourage the students to join in various professional societies like IEEE and CSI to develop their technical expertise and also to organize several student conferences / symposia / seminars / workshops in various trending topics. To make students well prepared to face the industry, they were imparted the requisite training by utilizing the services of external academia and professional practitioners for contesting in competitions like TCS Code Vita, Smart India Hackathon etc .
Visit: https://www.saec.ac.in/departments/artificial-intelligence-and-machine-learning/

ABOUT DEPARTMENT OF COMPUTER SCIENCE AND BUSINESS SYSTEMS (CSBS)

The Department of Computer Science and Business Systems (CSBS), established in 2022, has rapidly expanded from its initial cohort of 51 students to a robust community of 109 students. The B.Tech – Computer Science and Business Systems (CSBS) program is meticulously designed to meet the burgeoning demand for engineering talent adept in digital technology. This innovative curriculum blends core computer science topics with humanities and management sciences, equipping students to thrive in Industry Revolution 4.0. Our program offers comprehensive exposure to emerging fields such as Analytics, Machine Learning, Cloud Computing, and the Internet of Things, ensuring our graduates are "Industry Ready." This curriculum serves as a "One Stop Solution" to the increasing demands of the corporate world.
Visit: https://www.saec.ac.in/departments/computer-science-business-systems/

ABOUT DEPARTMENT OF ELECTRONICS AND COMMUNICTAION ENGINEERING (ECE)

The Department of ECE that imparts a Holistic Environment for Engineers was established along with the inception of the college during the year 1998-99 with an initial intake of 60 Students. Intake was raised to 90 during the year 2002-2003 and to120 in 2003-2004 and from 2012-2013, department has an intake of 180 students. Along with the Four year UG programme in Electronics and Communication Engineering, the department also runs a Two-year PG programme in M.E Communication Systems with an intake of 18 students from the year 2006-07.

The Autonomous status and NAAC 'A' certification ensure that department has highly experienced and dedicated faculty with state-of-art facilities.

The department paves way for a learning environment beyond the curriculum by offering value added training in Arduino/Raspberry Pi Embedded programming, Factory and Process automation, Artificial Intelligence using Python, PCB Designing and Prototyping, Robotics and Internet of Things. To enrich the student activities and to enhance their analytical, critical and logical thinking skills and also to promote creativity through application of theories, resource and innovative thinking, department conducts various events like seminar, symposium, Guest Lecture, Workshops, Group Discussion, Mock Interviews Organizes Industrial Visits, motivates Lab/Project Based Learning, Interaction with similar minds through Professional Society activities, provides Hands on Technical Training on modern tools and software.
Visit: https://www.saec.ac.in/departments/ece/

ABOUT IEEE CIRCUITS AND SYSTEMS SOCIETY (IEEE CASS)

The IEEE Circuits and Systems Society is the leading organization that promotes the advancement of the theory, analysis, design, tools, and implementation of circuits and systems. The field spans their theoretical foundations, applications, and architectures, as well as circuits and systems implementation of algorithms for signal and information processing.
Visit: https://ieee-cas.org

ABOUT PDP

Discover the transformative power of GPU Accelerated AI in our intensive one-week professional development program. This course is designed to equip professionals with cutting-edge skills and knowledge to leverage GPU technology for AI-driven business innovation and competitive advantage.

OBJECTIVES OF PDP

- **Understand GPU Technology**: Gain a comprehensive understanding of GPU architecture and its advantages for AI applications.
- **Master AI Techniques**: Learn advanced AI and machine learning techniques accelerated by GPU.
- **Innovate in Business**: Explore practical applications of GPU-accelerated AI in various industries.

OUTCOMES OF PDP

·**Gain Comprehensive Knowledge of GPU Architecture:**
  - Understand the components and advantages of GPU technology for AI applications.

·**Master Advanced AI and Machine Learning Techniques**:
  - Develop proficiency in AI techniques accelerated by GPUs, including deep learning frameworks such as TensorFlow and PyTorch.

·**Apply AI Solutions to Real-World Business Scenarios:**
  - Identify and implement practical applications of GPU-accelerated AI across various industries, such as finance, healthcare, and retail.
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COMMITTEE

FOUNDER

Thiru. D. Sudharssanam
Founder Chairman

BORAD OF TRUSTEES

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Thiru. D. Sabarinath
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Thiru. P. Venkatesh Raja
Correspondent, S. A. College of Arts & Science, Sudharsanam Vidyaashram

CHIEF PATRON

Dr. S. Ramachandran
Principal

ADVISORS

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Chair, IEEE CS Madras and IEEE CASS Madras Chaper &
Vice Chairman (Academics) IEEE Madras Section
Dr. S. Rajaram
Vice-Chairman, IEEE Circuits And Systems Society Madras Chapter
Dr. P. Kalpana Devi
Secretary, IEEE Circuits And Systems Society Madras Chapter

ORGANISING CHAIRS

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HOD, CSBS, SAEC
Dr. S. Koteeswaran
HoD, CSE (AIML) & IQAC Coordinator, SAEC
Dr. T. Annalakshmi
HOD, ECE, SAEC

CONVENORS

Dr. R. Radhika
Professor, ECE, SAEC
Dr. M. Nalini
Associate Professor, CSBS, SAEC
Ms. V. Praveena
Assistant Professor, CSE (AIML), SAEC

ORGANISING COMMITTEE MEMBERS

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Professor, ECE, SAEC
Dr. S. B. Mohan
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Assistant Professor, CSBS, SAEC
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Assistant Professor, ECE, SAEC
Ms. B. Sunantha Sri
Assistant Professor, CSBS, SAEC
Ms. V. Dhivya
Assistant Professor, CSBS, SAEC

SCAN ME

REGISTRATION FEE DETAILS

USE THIS LINK FOR REGISTRATION
https://forms.gle/EYJFkr1xxd6142EPA

Category	IEEE / Host Institute Members	Non-IEEE Members
UG / PG Students	Rs. 100/-	Rs. 200/-
Research Scholars	Rs. 300/-	Rs. 400/-
Faculty	Rs. 500/-	Rs. 600/-
R & D INDUSTRY	Rs. 700/-	Rs. 800/-

ACCOUNT DETAILS

Account Name	SAEC IEEE Student Branch
Account No	50106245804
Bank Name	Indian Bank
Branch	S. A. Engineering College Branch
IFSC Code	IDIB000C571

PDP KEYNOTE SPEAKERS & SCHEDULE

09:00 AM to 12:00 NOON   **01:00 PM to 04:00 PM**

DAY 1: 16.08.2024 (FRIDAY)

Session 1: AI, ML and Business Analytics

Session 2: DL, NLP and GenAI Connections

Dr. Sountharrajan S

Chairperson & Associate Profesor,
Amirta Vishwa Vidyapeetham, Chennai Campus

Dr. S. S. Chakravarthi

Associate Profesor,
Amirta Vishwa vidyapeetham, Chennai campus

DAY 2: 17.08.2024 (SATURDAY)

Session 3: GPU-based AI and ML Real Time Application in Innovative Business Systems

Session 4: The AI/ GenAI/LLM connections GenAI Application Development in Clouds & LLMS for Content Generation,Hugging Face Demonstration

Ms. Subashri Balaji

Senior Data Engineer,
Azure Community Champion

Dr. Shriram K Vasudevan

Lead-Technical (AI/GenAI)
Software Tools Ecosystem Specialist,
Innovator, Intel Certified, NVIDIA Certified

DAY 3: 19.08.2024 (MONDAY)

Session 5: Integration of AI and ML in Business Systems - Case Studies

Session 6: Challenges in the Cloud-Based AI Applicaton Development, AI PC and Evolution of NPUbased Case Study and Demonstration

Mr. P. Anandkumar

Director, ERP
Microsoft Pvt. Ltd

Dr. Shriram K Vasudevan

Lead-Technical (AI/GenAI)
Software Tools Ecosystem Specialist,
Innovator, Intel Certified, NVIDIA Certified

DAY 4: 20.08.2024 (TUESDAY)

Session 7: Introduction to GPU Technology - Evolution from CPU to GPU

Session 8: The Backbone of AI: Understanding Hardware Needs in Machine Learning

Dr. M. Dhayalakumar

Founder & Director,
Dhisai Technology Pvt Ltd, Tiruchirappalli

Dr. M. Dhayalakumar

Founder and Director,
Dhisai Technology Pvt Ltd, Tiruchirappalli

DAY 5: 21.08.2024 (WEDNESDAY)

Session 9: Real Time Application Development with Machine Learing and Deep Learning Using GPU

Session 10: Parallel Computing and Multi - core Architecture, Coaching

Dr. Masilamani V

Professor & Dean Students Affairs,
IIITDM, Kancheepuram

Dr. Noor Mahammad

Associate Professor,
IIIDM, Kancheepuram

DAY 6: 22.08.2024 (THURSDAY)

Session 11: Future Trends and Innovation in AI, ML and Business System

Session 12: Driving Business Innovation: The Role of GPUs in Hodoop Ecosystems

Dr. E. Suganya

Assitant Professor,
SSN College of Engineering Chennai

Dr. R. Suganya

Associate Professor Senior,
VIT Chennai

Selection Process

On first come and first serve basis first 100 participants will be selected and intimated through email.
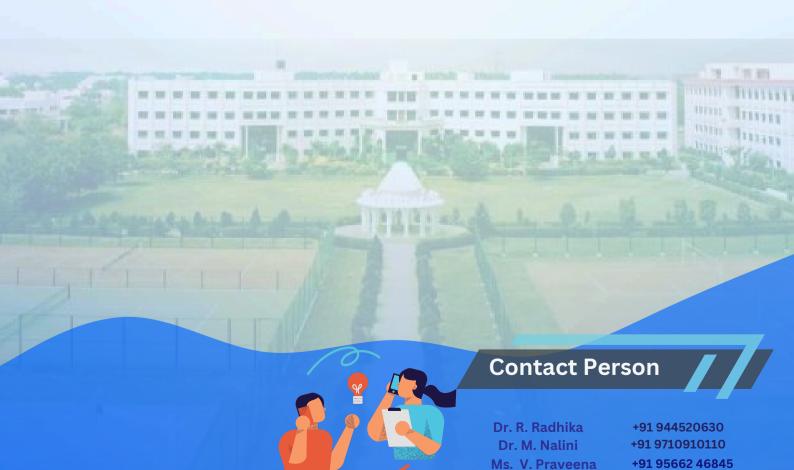
Who Can Attend ?

- UG & PG Students
- Faculty Members of Engineering Colleges /Arts College / University
- Research Scholars
- R&D and Industry Personnel

LAST DATE FOR REGISTRATION → **14 AUG 2024**

Contact Person

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