

Institution :

AAA College, established less than 13 years ago, achieved NAAC accreditation with an A Grade in 2021. In 2022, it was certified by TUV Nord for ISO 21001:2018 quality management standards. By 2023, the college received NBA accreditation for its Computer Science, Electronics and Communication, Electrical and Electronics, and Mechanical Engineering branches, and was designated a research center by Anna University for Ph.D. programs in Mechanical and Computer Science. In 2024, it was recognized as a host institute by MSME, Government of India and received NBA accreditation for Civil Engineering.

IMPORTANT DATES:

LAST DATE FOR RECEIPT OF APPLICATIONS: 04.02.2025

INTIMATION TO PARTICIPANTS: 5.02.2025

CONFIRMATION OF THE PARTICIPANTS: 7.02.2025

ASSOCIATE COMMITTEE

Mrs.S. Rajeswari AP/CSE

Mr.M. Asif Raja AP/CSE

TECHNICAL SUPPORT

Mr.M. Dinesh Kumar – TECHNICAL ASSISTANT

Mrs.N. Selva Lakshmi – TECHNICAL ASSISTANT

CONTACT US:

DR. R. RAJA GURU
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AAA COLLEGE OF ENGINEERING AND TECHNOLOGY
Amathur, Sivakasi



AAA COLLEGE OF ENGINEERING AND TECHNOLOGY

Approved by AICTE, New Delhi | Affiliated to Anna University, Chennai | Recognized under UGC section - 2F
Accredited by NAAC with 'A' Grade | Accredited by NBA Civil, (CSE, ECE, EEE, MECH)
Anna University recognized Research Centre (CSE, MECH) | An TUV ISO 21001.2018 Certified Institution
Managed by Vinayaga - Sonny Fireworks Group of Industries/Panjurajan - Amaravathy Trust
Kamarajar Educational Road, Sivakasi - Virudhunagar, Amathur - 626 005

COMMITTEE

CHIEF PATRONS

Dr.P.Ganesan

Correspondent, AACET

Dr.P.Karvannan

Secretary, AACET

Dr.K.Vignesh Kumar

Joint Secretary, AACET

PATRON

Dr. M. Sekar

Principal, AACET

ORGANIZING COMMITTEE



COORDINATORS

Dr. J. Hemalatha

Prof /CSE, AACET



CO-COORDINATOR

DR. R. Raja Guru

Prof /CSE, AACET



AICTE Training and Learning (ATAL)

Academy Sponsored
Faculty Development Program

on

**Transforming Disaster Management and
Resilience in Civil Engineering through
Adaptive AI and Neuromorphic Computing.**

10.02.2025 to 15 .02.2025

organized by

**DEPARTMENT OF COMPUTER SCIENCE
AND ENGINEERING**



ABOUT DEPARTMENT

The Department of Computer Science and Engineering at AACET has launched several initiatives to enhance students' industry readiness. These include setting up an AWS Centre of Excellence, establishing an Internet of Things lab with Riyasaa Labs, and partnering with Red Hat Academy to bridge the gap between education and industry. The Red Hat Academy, inaugurated in 2020, offers a curriculum aligned with industry demands, providing students with a superior learning experience. These efforts, along with certifications like Cloud Practitioner, IoT, Salesforce ADX-201, and Java Programming, supplement the curriculum provided by Anna University.

ABOUT FDP

Transforming disaster management and resilience in civil engineering through adaptive AI and neuromorphic computing offers significant improvements in our ability to predict, respond to, and recover from disasters. Adaptive AI can analyze real-time data from various sources, identifying trends and risks to facilitate proactive measures and optimize infrastructure design for resilience against extreme events. Meanwhile, neuromorphic computing enhances data processing speed and efficiency, enabling real-time analysis that supports quicker decision-making during emergencies. Together, these technologies foster a more integrated approach to disaster preparedness. Smart infrastructure can adapt to changing conditions, allowing buildings and systems to respond dynamically to threats, such as adjusting structural integrity during tremors or rerouting power during storms.

TARGETED AUDIENCE

The Faculty Members from Engineering/Arts & Science Colleges, Research scholars and PG students.

COURSE OBJECTIVES:

- To increase the precision of early warning systems and disaster forecasts, create artificial intelligence (AI) algorithms that examine large datasets, such as meteorological and geological data.
- Process real-time data from satellites, drones, and Internet of Things sensors using neuromorphic computing to provide quick situational awareness.
- Use AI-driven models to optimize resource deployment (such as supply and emergency services) based on anticipated needs.
- Analyze a building's or infrastructure's structural resistance to several disaster scenarios using adaptive artificial intelligence.
- Based on real-time data analysis, use machine learning algorithms to prioritize recovery operations and estimate damage.
- Use AI to provide interactive resources for community education on resilience and preparedness for disasters.
- Create cutting-edge simulations for emergency response and civil engineering training utilizing artificial intelligence and neuromorphic computing.
- Evaluate the effects of catastrophe response tactics on the environment.

COURSE OUTCOMES :

- Urban planning and policy-making that is well-informed and enhance resilience overtime.
- Disaster management approaches that are comprehensive take into account diverse perspectives and expertise.
- Strategies that balance the protection of ecosystems with effective disaster management.
- Preparedness improvement through realistic training scenarios that adapt to evolving situations.
- Increased public awareness and involvement in initiatives for disaster readiness.
- Quicker recovery processes and improved allocation of funds for rebuilding.
- Enhanced designs that are able to withstand disasters, reducing damage and recovery time.
- More efficient resource utilization leads to improved outcomes in disaster situations.
- Faster and more informed decision-making during disaster response and recovery.
- Timely alerts that can minimize loss of life and property by allowing proactive measures.

HOW TO APPLY :

The registration for the FDP can be done through Atal academy online portal on the link:
<https://atalacademy.aicte-india.org/login> .
Registration Fee: ' No Charge for Registration, Course and Certification ' .



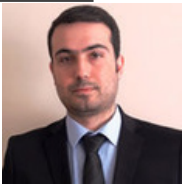
RESOURCE PERSONS :

Prof. Gang Li
Full Professor
Melbourne Burwood Campus, Australia
10 years experience



Prof. Lorna Uden
Full Professor
Staffordshire University, UK
20 years experience

R. Hüseyin Isik
Assoc. Prof. Hüseyin Isik,,
Bandirma Onyedi Eylul University, Turkey.
14 years experience



Prof. Akhtam Kalam
Full Professor
Victoria University, Melbourne
13 years experience

Mr. V. Vasantha Kumar
Executive Engineer,
NLC Neyveli
13 years experience



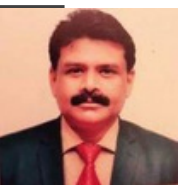
Dr. S. Venkataprasad
Senior Manager
TCS, Chennai
13 years experience

Mr. E. Guru Chandran
Full Stack Developer
Zoho Corporation Pvt Ltd
7 Experience



Deva Bala
Programming Head
Corent Technology Inc, Chennai
7 years experience

Prof. Dr. Subash Thanappan
Department of Civil Engineering
KAAF University College Republic of Ghana
10 years experience



Dr. Surendar M
Assistant Professor ECE
National Institute of Technology, Puducherry
13 years experience

Dr. O. Ganesh Babu
Assistant Professor
Anna University Regional Campus, Madurai
15 years experience



Dr. Vishwas Rathi
Assistant Professor
National Institute of Technology, Kurukshetra
15 years experience