#### **ABOUT THE COURSE:**

To acquire the knowledge of Generative Al and Data Science. Learn and Implement Al & Data Science techniques using modern tools. Develop scalable Aldriven solutions for real-world problems. Stay updated with emerging Al trends and research for next decade of Innovation.

#### COURSE OBJECTIVES:

- Stay updated with emerging Al trends and research. Predictions for Al's role in India by 2030.
- To bridge industry and academia skill gap.
- Foster innovation and entrepreneurship with Al.
  Leverage Generative Al for creative and practical solutions.
- Evaluate ethical, bias, and regulatory challenges in Al. Develop scalable Al- driven solutions for realworld problems.
- Foster innovation and entrepreneurship with Al.

#### COURSE OUTCOMES:

- Understand the fundamentals of Generative Al and Data Science.
- Apply Al & Data Science techniques using modern tools. Leverage Generative Al for creative and practical solutions.
- Analyze and interpret complex datasets.
- Develop scalable Al- driven solutions for real-world problems.
- Collaborate in multidisciplinary teams for Al integration. Stay updated with emerging Al trends and research. Contribute to India's Al ecosystem and digital growth.

#### **▶** REGISTRATION PROCESS:

- Participant shall register for the course as per the specified process of AICTE Training and Learning (ATAL)Academy.
- Visit https://atalacademy.aicte.gov.in/login for registration.
- NOC is compulsory. There is no registration fee for any participants The number of seats is limited, and seats will be allotted on a first come first serve basis. Arrangements for complimentary refreshments and s lunch have been made for all participant.
- External Participants will also get a lump sum Traveling allowance subject to traveling more than 20km one side and attending at least 90% of the sessions.

#### WHO SHOULD ATTEND THE COURSE

This course is useful for all branches Engineers aspiring career growth in the field of Generative AI and Data Science. The course will be most beneficial for:

- Engineering Post Graduates [M.E./ M. Tech. in Computer/ electronics/ IT/ Mechanical Engineering] & Allied Branches.
- Professionals in IT Consultancies, Utilities, Industries.
- Faculty members from academic and research institutions
- · PhD scholars

#### COURSE SCHEDULE

**DURATION:** 01st - 06th DECEMBER 2025

**TIMING:** 9:30 am - 05:30 pm

**MODE:** Offline

#### **CONTACT FOR MORE INFORMATION:**

Dr. Divya Chirayil 9820940007

Email: divyac@sies.edu.in

Dr. Sulochana Madachane 9769240747

**Email:** sulochanam@sies.edu.in **Fax No.:** (91) (22) 27708779

## AICTE SPONSORED ONE WEEK OFFLINE ATAL FACULTY DEVELOPMENT PROGRAM ON

# **Generative AI & Data Science:** Shaping India's Next Decade of Innovation

No.1743227410

### 01st-06th December 2025







#### **COORDINATOR**

Dr. Divya Y. Chirayil Associate Professor, Department of Information Technology

#### **CO-COORDINATOR**

Dr. Sulochana Madachane Assistant Professor, Department of Information Technology

#### **ORGANIZED BY**

SIES GRADUATE SCHOOL OF TECHNOLOGY NERUL, NAVI MUMBAI-400706

(Autonomous)

(Approved by AICTE and Affiliated to University of Mumbai NAAC 'A+' grade and NBA accredited )

#### **ABOUT THE INSTITUTE:**



The South Indian Education Society (SIES), established in 1932 at Matunga, is a pioneer in education. SIES Graduate School of Technology, founded in 2002, offers BE programs in EXTC, CE, IT, ECS, AIDS, AIML, CSE-IOT, ME, andPG coursesin AI & Data Science, and Information Security. EXTC, CE, and IT are NBA-accredited. The institute, approved by AICTE and DTE, autonomous, affiliated to the University of Mumbai, is NAAC 'A+'graded, TCS-accredited, and ISO 9001:2008 certified. SIES GST is committed to academic excellence, innovative teaching, and preparing learners for a rapidly evolving world.

#### > VISION OF THE INSTITUTE:

To be a centre of excellence in Education and Technology committed towards Socio-Economic advancement of the country.

#### MISSION OF THE INSTITUTE:

- To impart advanced knowledge in Engineering and Technology.
- To transform young minds towards professional competence by inculcating values and developing skills.
- To promote research and ensure continuous value addition among students and employees.
- To strengthen association with industry, research organizations and alumnitoen hance knowledge on current technologies.
- To promote next generation technocracy and nurture entrepreneurial culture for social-economic growth.

#### **ABOUT THE DEPARTMENT:**

Information Technology department was started in the year 2002 with an intake of 60. It is NBA and NAAC 'A+' accredited. The department has IETE student chapter and is well associated with industries and reputed academic institutes. Department laboratories are well equipped to support the training program and organizes various training programs, seminars and workshop. The department is committed for providing quality technical education.

#### **▶** OBJECTIVE OF ATAL ACADEMY:

- To set up an academy which will plan and help in imparting quality technical education in the country.
- To support technical institutions in fostering research innovation and entrepreneurship through training.
- To stress upon empowering technical teachers and technicians using Information and communication technology.
- To utilize SWAYAM platform and other resource for the delivery of trainings.
- To provide a variety of opportunities for training and exchange of experiences such as
- workshops, orientations, learning communities, peer mentoring and other faculty development programs.
- To support policy makers for incorporating training as per requirements.

#### > RESOURCE PERSONS:

The program will be conducted by eminent speakers from industry and academia.

#### > PATRONS:

Dr.V. Shankar. Hon. President SIES

Prof. K. Venkatramani. Hon. Secretary, SIES

Dr. P. V. Parameshwaran Hon. Advisor, SIESGST

#### **CONVENOR:**

Dr. K. Lakshmisudha Principal, SIESGST

#### > ORGANIZING COMMITTEE:

Ms. Leena Ladge. IT Dept

Ms. Mrinal Khadse. IT Dept

Ms. Savita Lohiya, IT Dept

Ms. Samundiswary S IT Dept

Ms. Sampada Lovalekar, IT Dept

Ms. Kalpana Bodke, IT Dept

Ms. Kalyani Salvi, IT Dept

#### **CONTENTS:**

- Introduction to Generative AI and Data Science with its applications in various fields.
- Python for AI & Data Science.
- Generative AI Basics- GANs, VAEs, Diffusion Models. Transformers & LLMs, GPT, BERT, and their applications Hands-on with realworld datasets.
- Fine-tuning LLMs for Indian Languages.
- Hands-on: Building a Simple Neural Network.
- AI Policy & India's Roadmap, National AI strategy.
- Case Study: AI in Indian Industries and Indian startups.
- Hands-on: Building a Chatbot, Using OpenAI.