



COEP Technological University

(COEP Tech)

A Unitary Public University of Government of Maharashtra

w.e.f 21st June 2022

(Formerly College of Engineering Pune)

Department of Computer Science and Engineering

Offers

**One Year Post Graduate Diploma In Data Science And Artificial Intelligence
(PGDDSAI)**

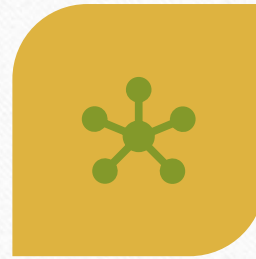
Objectives



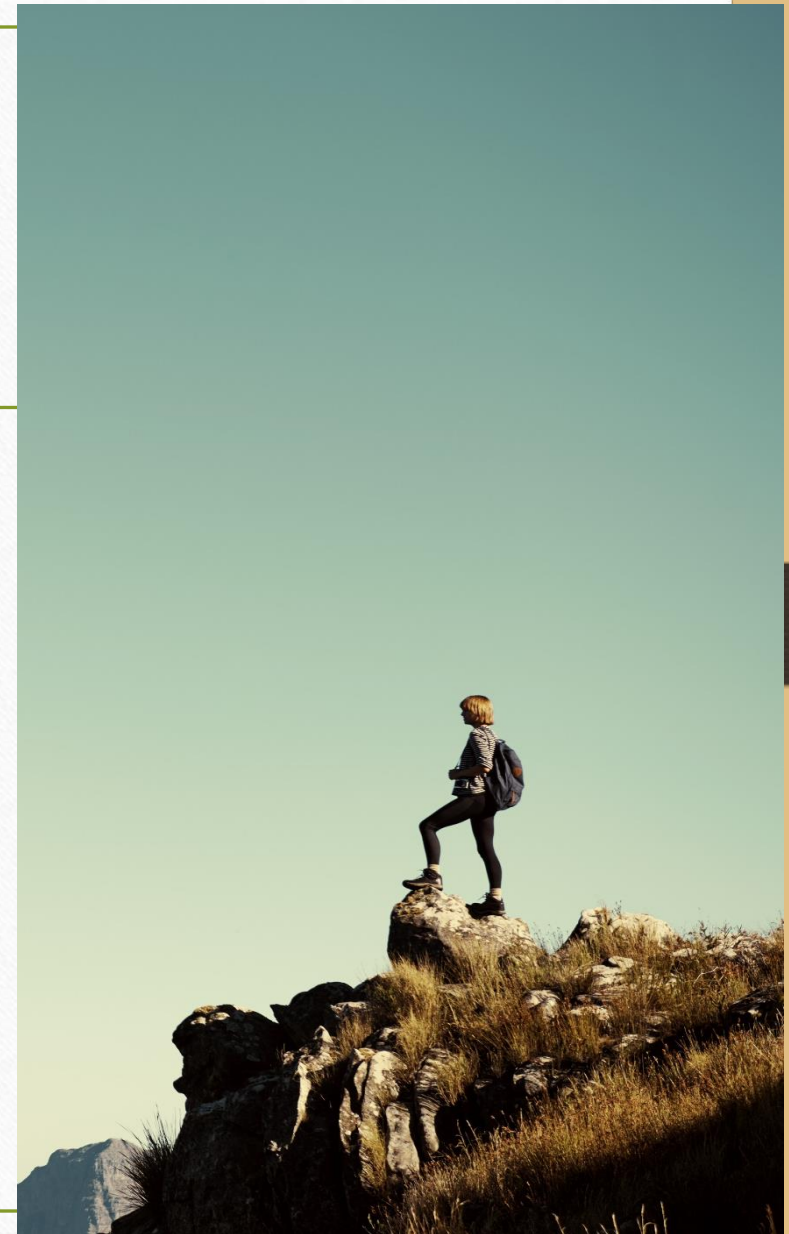
Discuss



Empower



Transform



Course Objectives

- **Foundation in Data Science and AI Concepts:** To provide students with a solid understanding of the fundamental principles, theories, and practices in data science and AI.
- **Hands-On Technical Skills:** To develop proficiency in programming languages commonly used in data science and AI such as Python, R, and SQL.
- **Data Analysis and Interpretation:** To train students in collecting, processing, analyzing, and interpreting large datasets.
- **Machine Learning and AI Applications:** To educate students on applying machine learning algorithms and AI techniques in various domains such as natural language processing, computer vision, robotics, and predictive analytics.
- **Problem-Solving Skills:** To enhance critical thinking and problem-solving skills, enabling students to tackle real-world challenges using data-driven approaches.
- **Project and Research Experience:** To provide practical experience through projects, case studies, and research opportunities.

About COEP Tech.

College of Engineering, Pune (CoEP), chartered in 1854 is a nationally respected leader in technical education. The institute is distinguished by its commitment to finding solutions to the great predicaments of the day through advanced technology. The institute has a rich history and dedication to the pursuit of excellence.

COEP Tech offers a unique learning experience across a spectrum of academic and social experiences. With a firm footing in truth and humanity, the institute gives you an understanding of both technical developments and the ethics that go with it. The curriculum is designed to enhance your academic experience through opportunities like internships, study abroad programmes and research facilities.

The hallmark of COEP Tech education is its strong and widespread alumni network, support of the industry and the camaraderie that the institute shares with several foreign universities. The institute is consistently ranked amongst the top 20 technical colleges in India and its alumni have contributed a lion's share in development of national infrastructure.

Department of Computer Science and Engineering

The Department of Computer Engineering and Information Technology, established in 1992, offers two undergraduate programmes, namely, B. Tech (Computer Engineering) and B. Tech (Information Technology). In 2018 Information Technology course closed and merged into Computer Engineering with the intake of 120.

The Department is currently known as Computer Science and Engineering, and offers four post graduate programmes M. Tech (Computer Engineering), M. Tech (Data Science), M. Tech (Cyber Security) and M. Tech (Information Security).

The department is a recognized research center under Savitribai Phule Pune University for the Ph. D. (Computer Engineering) programme. The faculty of the department is actively engaged in research in the areas of Cloud Computing, Information Security, Cyber Security, Machine Learning, Natural Language Processing, Data Analytics, Bioinformatics, Networking, Green Computing, Signal Processing, Multimedia and Embedded Systems. The department promotes open source software development. The department boasts of having strong alumni base and industry association.

About PGDDSAI

This is the most exhaustive program designed for students and professionals planning to make a career in Data Analytics, Data Science, Machine Learning, Deep Learning and Artificial Intelligence Space. This course covers different modules to build various skill sets participants need to tackle any type of Analytics problem. The modules coverage ensures that participants learn from fundamental to advanced levels. The program has been designed to focus on hands-on practical learning and a case study based learning approach is adopted. Various modules like Business Thinking, Data Management, Programming tools like Python and R, Statistical and analytical thinking, Predictive Analysis with Machine Learning, Artificial intelligence with Deep Learning are designed along with industry experts. The course will culminate with an opportunity to work on a real time project with our industry partners. At the end of the program, the students successfully completing the coursework and project will receive a PG Diploma in Data Science and AI from COEP.

■ Faculty

In-house as well as renowned and experienced faculty from the industries, R&D organizations and other reputed institutes will be involved in teaching-learning process of the entire program.

Syllabus

Sr.No.	Subject	Credits		Total Credits	Duration
		Theory	Lab		
Trimester-1					
1.	Programming Fundamentals using Python	1	2	3	16 Weeks
2.	Mathematics for Data Science	3	-	3	
3.	Data Warehousing using MySQL and MongoDB	2	1	3	
4.	Machine Learning Fundamentals	2	1	3	
5.	Data Visualization using Tableau and PowerBI	1	2	3	
		Total Credits		15	
Trimester-2					
6.	Introduction to Artificial Intelligence	3	-	3	16 Weeks
7.	Big Data Technologies	2	1	3	
8.	Deep Learning	3	-	3	
9.	Natural Language Processing	2	1	3	
10.	Programming Fundamentals using R	1	2	3	
		Total Credits		15	
Trimester-3					
11.	Ethical AI and Advanced Machine Learning	3	-	3	16 Weeks
12.	Computer Vision	3	-	3	
13.	Industry Project	9	-	9	
		Total Credits		15	
PGDDSAI Course Total Credits				45	

About PGDDSAI

Eligibility Criteria

- Any Engineering Graduate/BCS/BCA/MCA/MCS and Candidate having Mathematics and Statistics can apply.
- Fresher's and Candidates with prior work experience both can apply.
- Those appearing for their final year degree examination may also apply. On selection, such candidates will have to fill a Notarized undertaking on Rs. 100/- Non-Judicial stamp paper and submit it to PGDDSAI Admissions Team at the time of payment of Program Fees

Selection Criteria for Admission

Written Test and Interview

Total Number of Seats:

Total Number of seats for the program is 60

Course Fees:

Rs. 2,10,000/- (Rupees Two Lakh Ten Thousand only) for full course

Course Commencement Date:

16th August 2024

Admission Dates

Tentative dates for admissions process of PGDDSAI 2024-25.

Activity	Date
Online Form Uploaded On	Monday, 8th July 2024
Last Date to apply Online	Wednesday, 31st July 2024
Offline Written Test/ Personal Interview	Friday, 2nd – 5th August 2024
Provisional Merit List	Monday, 5th August 2024
Last date to pay Program fee	Monday, 12th August 2024
Program Commencement	Monday, 16th August 2024

For more details click on : [PG Diploma – COEP Technological University \(COEP Tech\)](#)

Program Features & Facilities

- ✓ **Online Live SESSION:** Instructor led LIVE in-depth sessions
- ✓ **Communications:** Two-way communication via text & speech
- ✓ **Industry Projects:** Multiple domains specific projects & discussions
- ✓ **Cloud-based Lab:** Cloud-based online lab for hands-on training

Address for the Communication

Dr. Khushal D. Khairnar

PGDDSAI Coordinator,

Department of Computer Science & Engineering,

COEP Technological University Pune,

Welleseley Road, Shivajinagar, Pune 411005,

Maharashtra, India

Telephone: +91-7387995807

Email Id: pgdsai.comp@coeptech.ac.in

Website: <https://www.coeptech.ac.in/admission/pg-diploma/>

A photograph of two hikers on a rocky mountain peak. The hiker on the left is wearing a yellow jacket, a black beanie, and a white helmet, and is leaning forward to assist the other hiker. The hiker on the right is wearing a red jacket and a red beanie, and is sitting on a rock. Both hikers have backpacks. The background is a cloudy sky. The text "Thank You" is overlaid in the center of the image.

Thank You