# **Course Structure**

S	Sr. No.	Subject title	Course Type	Credits	Duration
		TRIMESTER 1			
	1	Concepts of Data Management	Core	3	16 weeks
	2	Python Programming	Core	3	
	3	Foundations of Statistics and Business Metrics	Core	3	
	4	Data Visualization with Tableau	Core	3	
	5	Machine Learning Fundamentals	Core	3	
	Trimester 1 - Total Credits		al Credits	15	
TRIMESTER 2					
	1	R Programming	Core	3	16 weeks
	2	Artificial Intelligence and Fundamentals of Deep Learning	Core	3	
	3	Time Series	Core	3	
	4	Big Data Analytics with Apache Spark	Core	3	
	5	Machine Learning Advanced	Core	3	
Trimester 2 - Total Credits			15		
TRIMESTER 3					
	1	Deep Learning Advanced	Core	3	20 weeks
	2	Natural Language Processing	Core	3	
	3	Industry Project		9	
Trimester 3 - Total Credits			15		
		Course Total Credits		45	52 weeks

#### Information to the Candidates

## **Eligibility Criteria:**

- Any Engineering Graduate/B.Sc/BCA/BCs and Candidate having Mathematics, Statistics and similar degrees can also apply.
- Freshers 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.

#### Course Fee:

• Course fee mentioned on the website is to be paid online at the time of the admission.

#### Selection Criteria for the admission:

• Candidates shall be admitted as per the Selection Procedure Mentioned on the website.

#### **Total Number of Seats:**

Total Number of seats for the program is 60

#### Address for the Communication:

PGDDSAI Admissions
Department of Computer Engineering and
Information Technology
College of Engineering Pune,
Wellesely Road, Shivajinagar, Pune 411 005,
MAHARASHTRA, India

Telephone: +91 020 25507102
Fax: +91-20-25507299
Email Id:
pgddsai@coep.ac.in
Website:
http://pgdadmission.coep.org.in





**Department of Computer Engineering** 

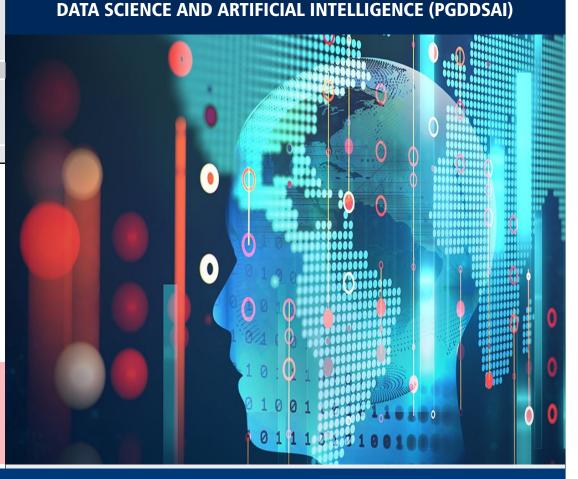
in association with

# **DIMENSIONLESS TECHNOLOGY**



**Offers** 

# ONE YEAR (ONLINE) POST GRADUATE DIPLOMA IN





# **About COEP**

Established in 1854, College of Engineering Pune (COEP) has a glorious history of excellence in engineering education. COEP has witnessed many notable alumni like, Bharat Ratna Sir M. Visvesvaraya, Prof. Thomas Kailath and Dr. C.K.N. Patel (both decorated with coveted IEEE Medal of Honor) and scores of others. COEP was granted autonomy in the year 2003. Today, it continues to be a role model for technical institutes of India. The hallmark of COEP is its strong and widespread alumni network, support of the industry and the companionship that the institute shares with several foreign universities. COEP is consistently ranked amongst the top 20 technical institutes in India. It is the only institute in Maharashtra state which has two Centers of Excellence under TEQIP, namely, Center for Smart Renewable Energy Systems and Center for Signal and Image Processing.

Center for Smart Renewable Energy Systems, plays a remarkable role in research and technology innovations for solar-thermal systems, grid and off-grid solar/wind systems, real time simulation of the energy systems and energy management. It also aims at addressing other critical areas in energy systems that are essential for economic development in the state of Maharashtra and beyond. Center for Signal and Image Processing, is focused on investigation, research and experimentation spanning over a diversified range of signal processing and contributes in developing real life application useful to industry and society at large.

# **Department of Computer Engineering & IT**

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).

The Department offers two post graduate programmes M. Tech (Computer Engineering) 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 the Course**

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.

## **About Dimensionless**

Dimensionless Technologies is a Tech Startup founded by IIT alumni, imparting industry relevant Data Science and Artificial Intelligence trainings since 2015. They have trained over 5000+ students in these years and have very high course completion and career transition rate. They are knowledge partners to TCS for its TCS-lon Certification exams in Data Science. The company also builds AI based products and has built products for Airport security which are being deployed across Airports in India and abroad.

# **Program Features & Facilities**

#### Online Live Session:

Instructed led LIVE in-depth sessions

## **Communications:**

• 2 Way communication via text & speech

## **Industry Projects:**

• Multiple domains specific projects & discussions

## **Cloud Based Lab:**

Cloud-based online lab for hands-on training

# **Unique Trimester Pattern**

#### First Trimester:

- Get into the groove of problem solving with conversion of business problems to data problems by working on real world cases.
- Learn the fundamentals of Data Analytics with hands-on case study based learning on Statistics,
   Linear Algebra, and Machine Learning.
- Understand how data systems work with knowledge of Database Management and deep dive into Programming with R and Python.

#### Second Trimester:

- Learn advanced Machine Learning.
- Get started with Deep Learning technologies and understand how image analysis, speech analysis and text analytics are done with real industry use cases.

#### Third Trimester:

- Get industry exposure with 3 months internships with various industry partners.
- Build ML Products and learn to deploy it.

