



Post Graduate Program in Applied Data Science

Accelerating Career Paths | Building Data Skills
Creating Data Science Professionals

School Of Data Science

A person is working at a desk. On the left, a laptop is open, displaying a blurred screen. In the center, a hand holds a pen over a document. To the right, another hand is visible, also holding a pen over a document. The background shows more papers and a pen holder. The entire image is overlaid with a semi-transparent red filter.

Choose a **career**
you **desire.**

Message from the Institute

The next generation of business leaders will be ones who master business, technology and data. Leading companies like Google, Facebook, Netflix, Pandora and Amazon have data and smarts built into their DNA and that is the source of their competitive advantage. The ubiquity of data has made it possible for all types of organizations to take advantage of abundant data they capture through sensors, webpages, transactions, social media and the like. However, the data advantage is not possible without the people with the skills to help mine the diamonds out of the data quarry. It's time for professionals to reskill or perish.

The Post Graduate Program in Applied Data Science (PGPADS) is a 12 months experiential program designed by the School of Data Science of Institute of Product Leadership, in collaboration with our Industry council comprised of global leaders in data science. The program equips professionals with applied data science skills that enables them to build their careers in the data science space.

The program will help you develop skills in data science principles, algorithms, statistics and mathematics, along with a strong business acumen, and cross-functional skills. Armed with these skill-sets, data science professionals will shape the future workforce of the industry.

Welcome to the School of Data Science!

Director,
School of Data Science
Marya Wani, Ph.D.

**“ Creating the next gen
data smart professionals ”**



Why the PGP in Applied Data Science?

PGP in Applied

Data Science Advantage

The PGP in Applied Data Science program helps professionals learn essential applied data science skills along with developing the business acumen to maximize the ROI from data. Data science professionals with business knowledge are critical for the success of organizations today and in future.

Career Management

Our career management cell provides a holistic career guidance and placement to our students. The focus is on building your data science career along with providing you placement opportunities. Our industry outreach helps you gain access to your dream companies, where you can showcase your data science skills and build your career.

Focus on Skills

The program is highly focused on your capabilities of handling, using and evangelizing data practices in your organization. Our mentors work with you to ensure that your skills are developed and highlighted by developing your portfolio of data science artifacts. There is relentless focus on ensuring that your talent in data science is showcased for your successful data science career.

Program Delivery

The program faculty are experts from the industry who help you understand the practical aspects of data science and its application in business. Our faculty are veterans in the field with decades of experience and proven expertise in their area of specialization.



Pedagogy And Curriculum

The program curriculum was developed by expert designers in collaboration with our industry council to create a unique blend of courses that address the data science needs of the industry.

Our proven experiential learning pedagogy has been endorsed by the industry and our past senior executive students alike. The institute prides itself in its unique pedagogical interventions that are specially designed for the learning needs of working professionals.

**“ Building the workforce
of the future ”**

Structure

Quarter 1



**FOUNDATIONAL COURSES +
SKILL LABS**

Quarter 2



**FOUNDATIONAL COURSES +
SKILL LABS +
DATA SCIENCE PORTFOLIO**

Quarter 3



**ADVANCED COURSES +
SKILL LABS +
DATA SCIENCE PORTFOLIO**

Quarter 4



**CAPSTONE +
SKILL LABS +
DATA SCIENCE PORTFOLIO**



The program duration is 12 months including 9 months of course and project work and 3 months of industry internship.

All courses are delivered on alternate weekends with coaching sessions on weekday evenings

Designed specially for building your applied data science skills, the program courses are based on industry challenges and underlying principles of data science. The program also gives you a holistic understanding of the immensely vast field of data science that is a multidisciplinary conglomerate of various fields of science, mathematics, business, and technology.

Today the Internet is inundated with courses, learning materials, videos and tutorials on data science, we provide you a navigation system so that you access the right content in the right sequence and save yourself from “death by content.”

The program is designed for you to go beyond the content and start building your data science portfolio. It is time for you to showcase your talent rather than become a consumer of web content.

Hands on Learning Experience

Integrated Curriculum

Industry relevant and actionable learning through hands on problem solving are the highlights of the program experience. The focus is to create a holistic understanding of data science for the participants so that they stand out in candidature for data science careers.

Continuous Coaching and Mentoring

While course modules are delivered in classroom, our coaches and mentors are available for continuous guidance for the students should they need any help. Apart from that, each participant is tied to a mentor who helps ensure that his/her learning is on the right track.

Experiential Learning and Skill Labs

As part of the Skill Labs participants get hands on experience in solving real challenges and building solutions to real problems. Every participant works on projects that are part of course evaluation, supported by mentors and coaches. Each of these projects are a showcase for your data science skills which are critical for your hiring.

Build your data science career through an educational experience which is relevant, industry focused and relevant. Take charge and **build a career you love!**



Faculty

Our faculty are experts and industry professionals with deep knowledge of data science and its application in the real world. They are expert facilitators who understand pedagogy and curriculum as well as the industry practices.



Dr. Marya Wani
Program Director,
School of Data Science



Prof. Mukesh Rao
Sr. Faculty and
Data Science Practitioner



Prof. Manohar Rao
Sr. Faculty,
Advanced Analytics



Prof. Pinkesh Shah
Director of Programs and
Sr. Faculty,
Institute of Product Leadership



Prof. Rishiraj Dasgupta
Sr. Faculty,
Statistics and Data Analysis



Prof. Rahul Abhyankar
Director of Programs and
Sr. Faculty,
Institute of Product Leadership

Curriculum

Design of Experiments and Statistical Inference



Statistics and mathematics lie at the heart of data science. They form the building blocks of finding insights from data.

Thoughtful and through design of your studies in data science is critical to success of such endeavors. Scientific design of experiments is a field that has been solidified by great scholars in different fields. For data science professionals, this skill of planning the data science project scientifically is critical so that the ROI on data science can be realized in a systematic manner.



Programming tools: R, Python, SQL

Programming languages like R, Python, SQL and others enable data science professionals to analyze, wrangle and visualize data. These are essential tool kits for any data science professional.



Algorithms and their application

Algorithms help with the analyses of data and are used to derive meaning from data. Random forest, clustering, regression analysis, decision trees, principal component analysis (PCA), time series analysis are some popular algorithms in data science.



Machine Learning and Predictive Modeling

Implementation of machine learning, unsupervised learning using popular program languages and predictive modeling are focused in this course.



Artificial Intelligence: NLP, Deep Learning

This course is focused on providing the most fundamental knowledge on artificial intelligence, deep learning and natural language processing. Participants who are further interested in exploring AI are encouraged to take up further courses in this area.



Data Wrangling and EDA

Manipulating, preparing and exploring data before applying sophisticated algorithms accounts for the majority of time spent on in the data management life cycle. As data science professional, this is a must have skill.



Data Management

The world is moving towards better data management as disk spaces are increasingly finding it difficult to capture and maintain the ocean of data that are generated over the web, sensors, transactions etc. This course provides a comprehensive understanding of data management systems and implementation.



Distributed Computing

This course introduces students to the key concepts and techniques underlying the design and engineering of distributed computing systems that enable modeling databases of events for optimal storage, accessibility, extraction, transferring and loading data into storage databases.



Data Visualization and Design Thinking

This course focuses on design and presentation of data using principles of design thinking, visualization and graphic design. Communication of data results and insight is highly valued skill in data science. It enables non-data scientists to consume and operationalize data. For these users and others, understanding what the data are saying is critical before they start acting on it.



Communicating and consulting with Data

An advanced skill that helps data science professionals to build their brand by communicating data with power and consulting organizations on how strategic use of data can be made.



Leadership and Strategy

Leadership and strategy skills are essential for any professional who wants to move up the corporate ladder and data science is no exception to this rule.



Data Driven Decision Making

The value of data science cannot be realized unless organizations imbibe a data culture into their decision making. This course helps you to contextualize the data insights to the business use case to maximize the ROI of data. Real life business situations are a lot more complex than what the models are suggesting, having an ability to work around the complexity of real world decision making is a must for being effective.

“ Build your data science career through an educational experience which is relevant, industry focused and relevant. Take charge and build a career you love! ”

Careers

Our Career Management Cell helps you transition into a data science career



Industry Connect

We have developed a strong network with the industry that helps us connect with MNCs and Growth Startups. We leverage this network to find opportunities for our students at different tiers of management. Hiring managers visit our campus regularly.

Industry Projects

Our career management cell actively works with the industry sponsors to provide challenging industry projects for the participants. These projects help you showcase your skills and transition into your desired roles.

Career Counselling and Placement

Our career management cell provides ongoing and tailored career assistance like resume building and interview preparation to our participants. The career assistance is focused on providing placement opportunities to our participants based on their skills and aspirations.

Career Management Cell

The essence of the career management cell is to assist each participant in their career transition into a data science career. We provide services and resources to help participants in the program to access career opportunities within established corporates as well as emerging startups.

Eligibility

Ideal Candidates



Business Analysts



Engineers



Database
Administrators



Solution
Architects



Professionals with high
learnability skill

Eligibility

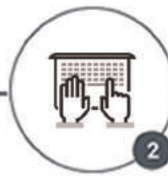
- A Bachelor's Degree with minimum 50% score
- Upto 5 years of work experience

Admission Process

Admissions are done via the 3-step process outlined below.



Fill the online
application form



Appear for the online
Data Science Aptitude Test



Upon qualifying the Data Science
Aptitude test, you will be screened by the
admission panel via personal interview

School of Data Science

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