



EXECUTIVE POST GRADUATE DIPLOMA IN ANALYTICS (EPGDA)

TATA INSTITUTE OF SOCIAL SCIENCES
Labour Market Research Facility (LMRF)
(Weekend Programme)

ACADEMIC CALENDAR



Last Date for Applying online
30th November, 2017



Personal Interview
9th December, 2017



Announcement
14th December, 2017



Commencement of Academic Session
(2017-2018)
6th January, 2018

INTRODUCTION

The convergence of information and communication technologies, deep learning and artificial intelligence is an exciting opportunity to organise complex systems and enhance our knowledge with new variants such as big data analytics and data science. Along with higher precision it also generates career opportunities in the labour market. Analytics, as a branch is not novel. We have spent considerable time and resources in designing, tabulating, presenting, drawing inferences, and predicting. The newer world, an information centric one, however, demands tools for handling bigger data sets that often can not be handled by conventional statistical and econometric techniques such as regression.



Big data analytics differs from the conventional approach on three fronts;

- ◆ Volume of data that it can manage
- ◆ Higher number of potential predictors to unravel
- ◆ Complex non-linear patterns.

Multi-lateral institutions like European Commission (EC) predicts a surge in Big Data/Data Science/Analytics professions in United Kingdom. As a pioneer in Information Technology, India is set to become an important node in the Big Data/Data Science/Analytics global network. Tata Institute of Social Sciences (TISS), a public funded deemed university, offers an inclusive learning opportunity in Analytics. Labour Market Research Facility (LMRF) at TISS shall be anchoring the programme.

EXECUTIVE POST GRADUATE DIPLOMA IN ANALYTICS (EPGDA): PROGRAMME DESIGN OBJECTIVES OF EPGDA

Creating talent in the emerging contours of data sciences, big data, and analytics

Stressing the importance of applying analytics in corporate intelligence, public policy analytics and social big data

Encouraging creativity and innovation in the field

Building capacity among the participants to envisage and manage independent projects

KEY FEATURES OF THE PROGRAMME

8 months part time professional programme of instruction and training

Modular schedule that encourages students to pursue high quality education without comprising on professional commitment

Facilitates upward mobility of working professionals or their transit to a new occupational profile

Perfect blend of theory and practice imparted by faculty and practitioners from reputed companies

Innovative workshops that enhance learning and offer networking opportunities

Maximising the productivity over weekend to gain knowledge and learn the best practices of data analytics



ELIGIBILITY

- For applying this Programme applicants should have completed their Bachelor's Degree of minimum of 3 years duration or its equivalent (under the 10+2+3 or 10+2+4 or 10+2+2+1 year bridge course pattern of study or any other pattern fulfilling the mandatory requirements of 15 years formal education) from a recognised university, in any discipline.
- Having at least 2 years of work experience after graduation as on 20th November, 2017.



MODULES AND CREDITS

The programme spreads over eight months and consists of 450 hours of learning which are equivalent to 30 credits. EPGDDA consists of three modules: Foundations, Technology and Applications, and Project Management.

EPGDDA MODULES AND CREDITS

Serial Number	Module	Credit (Hours)
Module 1: Foundations (10 Credits = 150 Hours; 2 Months)		
1	Data Structures and Research Designs: Cross Sectional, Time Series, Longitudinal	2 (30)
2	Descriptive Statistics : Tabulation and Presentation	2 (30)
3	Probability and Inferential Statistics	2 (30)
4	Multivariate Methods: Models and Methods	2 (30)
5	Data Science	2 (30)
Module 2: Technology and Applications (10 Credits = 150 Hours; 2 Months)		
6	Introduction to R	2 (30)
7	Introduction to Python, Relational Databases/Hadoop/Map reduce/Spark/Cloud Computing	4 (60)
8	SPSS, STATA and SAS: syntax and tools	2 (30)
9	Basics of Geographic Information System (GIS)	2 (30)
Module 3: Project Management (10 Credits = 150 Hours; 4 Months)		
10	Project Management	2 (30)
11	Analytics Projects in Business: Marketing, Human Resources Management, Finance, Strategy	2 (30)
12	Analytics Projects in Socio-Economic Planning: Social Protection/ Poverty/Environment/Labour Market/Livelihoods/Health/ Education	2 (30)
13	Analytics Projects in Social Media	2 (30)
14	Student Seminar on Analytics	2 (30)
15	Total Hours (Credits)	450 Hours (30 Credits) = 8 Months

MODULE TAKEAWAY

1. FOUNDATIONS

Participants will learn to handle large social media and socio-economic databases such as National Sample Survey, National Family Health Survey, India Human Development Survey Data, Annual Survey of Industries, Economic Census, Census and longitudinal corporate databases. To learn the basics of predictive analytics, participants will be taught probability and inferential processes and multivariate techniques. By the end of this module, participants would have learnt data handling in terms of design, structure, presentation, inferences, and prediction.

2. TECHNOLOGY AND APPLICATIONS

Participants will learn technologies like R software, Python, Hadoop, Map reduce, Spark, Cloud, Relational Databases, SPSS, STATA, SAS, and GIS. Participants will get an opportunity to innovate on creative data/technology integration processes.

3. PROJECT MANAGEMENT

Participants will learn behavioural, financial, and technical nuances of project management in terms of peoples' skill, scheduling, documentation and presentation. Participants will work on analytics projects in diverse domains such as marketing, human resources, finance, strategy, labour market, livelihood, health, poverty, environment, education, and social media.

PEDAGOGY AND EVALUATION

The programme will use an interactive and integrative pedagogy, consisting of lectures, live projects, practicum, seminar, and case studies. TISS evaluation standards will be applicable to EPGDDA.



INTAKE
30 PARTICIPANTS

FEES

Composition of Fee			
Sr.No.	Particulars	Installment 1	Installment 2
1	Tuition	69100	66600
2	Identity Card	300	
3	Examination	1000	1000
4	Computer Infrastructure	1000	1000
6	Development Fund	2500	2500
7	Library	1000	
8	Library Deposit (Refundable)	2000	
9	Convocation Charges		2000
	Total	76900	73100
Total Fee (Rupees)		150,000	

CLASS TIMINGS

Saturdays : 2:00 pm to 8:00 pm

Sundays : 9:00 am to 4:00 pm

The classes will be held at the Institute premises (Mumbai Campus) every weekend

SUPPORT

Candidates facing technical issues are requested to write an email to pgadmission@tiss.edu/analyticstiss@gmail.com with an appropriate subject and description of the problem. Alternatively the candidate can call TISS Helpline **022-25525252** for general enquiries or for registering technical issues faced while filling the online application form.

SELECTION PROCEDURE

Those satisfying the eligibility requirement will be called for the Personal Interview by the Selection Committee. The list of selected candidates will be notified on the Institute Website (<http://www.tiss.edu>). The Institute will not take responsibility for informing the selected candidates by post.

Candidates may make inquiries on TISS Helpline: 25525252





(Deemed to be University since 1964; under
Section 3 of the UGC Act, 1956)

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