

The logo for the School of Petroleum Management (SPM) features the letters 'SPM' in a large, bold, white sans-serif font on an orange rectangular background.

SCHOOL OF
PETROLEUM
MANAGEMENT



DATA ANALYTICS, MINING & VISUALIZATION FOR MANAGERS

5 DAYS

(16th – 20th March, 2020)

10:00 AM – 5:00 PM

AVAILABLE SEATS – 20



TECHNICAL PARTNER

ABOUT THE PROGRAMME

Decision maker in organizations mine information from varied sources for effective analytical outcomes. Understanding a business problem/ opportunity in an organization which requires data analytics methodologies and then being able to plan through the entire process has become the need for business managers today. Accessing, processing and analysing the data pose several challenges for the users in managerial roles, primarily because of the nature of the data and complexities involved in processing them for required outcomes. Additional challenge is to be able to communicate the outcomes in a story form using dashboards that the client is able to interpret and understand appropriately. Data mining, model building, interpretation of outcomes and data visualization are being used by decision makers to address this need. This programme will use RapidMiner, Statcraft, MS Excel and Tableau as a medium to do business problem solving that facilitates understanding of data analytics, data mining and visualization for analytics decision making both in academia and industry.

PROGRAMME OBJECTIVES

1. Be able to understand the role of Analytics in Business Decision Making
2. Be able to understand the significance of Planning in Business Analytics
3. Be able to connect the role of data mining and analytics to enhanced decision making.
4. Use Rapidminer as a medium for building data mining models with relevant examples.
5. Be able to build and analyze analytics models using Statcraft.
6. Interpret and communicate the statistical outcomes using MS Excel and Tableau software for building business dashboards.

PROGRAMME CONTENT (SHALL COVER THE ENTIRE VALUE CHAIN OF BUSINESS ANALYTICS)

1. Business problems, data mining and Analytics - the Connect
2. Being able to think through the need for building specific analytical models for business objectives and interpreting outcomes
3. Building data mining models for solving business problems and decision making
4. Building dashboards and story for communicating statistical outcomes

PROGRAMME FEE

INR 15000 per participant plus GST (Non-residential). Residential arrangements can be made as per request at PDPU Campus/attached campuses at applicable rates on first come-first serve basis. Candidates are also at their discretion to make their own arrangements, if needed.

*MDP Office shall register your candidature and mail you the bank details for transfer of MDP fees after receiving the registration details from you.

FACULTY PROFILE

Dr. Tanushri Banerjee is Associate Professor and Chairperson MDP Programmes, School of Petroleum Management at PDPU. She is also the Faculty Advisor for Business Analytics Teaching Lab at SPM, PDPU. Dr. Banerjee has 22 years of work experience divided between academia and industry. Prior to joining PDPU, she was Associate Director at Duke Corporate Education (India), a joint venture between Duke University and IIMA. She has also been Faculty at Maharaja Sayajirao University, Gujarat University, and visiting faculty at Nirma Institute of Management and Nirma Institute of Technology teaching courses at MDP, PG and UG level. She has been invited as guest faculty at IIM Ahmedabad, KCM, Nepal and other institutes of repute in India. She has previously worked as Systems Analyst at the Corporate Headquarters of Abbott Laboratories in Chicago, and was also Manager of Information Systems at Torrent Pharmaceuticals and Mudra Institute of Communications.

She has recently co-authored 2 books on Data Analytics by SAGE publications. Additionally, presented papers in conferences globally and has publications in national and international journals. At PDPU, she has conducted MDPs for Mid to Senior Level managers on "Business Acumen" and also teaches in Executive MBA, MDPs, PhD and MBA classes. She has earned her undergraduate degree in Electronics Engineering from M.S. University, Baroda, India, Masters Degree in Information Systems from the University of Illinois-Chicago (UIC) and a Ph.D. in Management (Decision Science) from M.S. University, Baroda, India. Her research interest lies in the area of data driven decision making, Business Intelligence and associated emerging technologies creating business impact, and women empowerment.

Mr. Saurabh Agarwal is a graduate and post graduate engineer from IIT Kanpur and IIT Delhi. He is a trainer to Great Learning, Chennai & EICT Academy IIT Guwahati. He is a consultant to IBM and UNESCO for

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Business Analytics. He has interest in Data Mining, Data Analysis, Business Analytics, Structural Equation Modelling, Machine Learning and works on platforms like R, Python, SPSS, Amos, Clementine, IBM Watson Analytics. He has conducted international workshops/trainings for Saudi Aramco biggest oil refinery in world, Kiatanin Bank Bangkok, KBM Kuwait, Ministry of Road Transport Abu Dhabi and prominent domestic trainings at AIMA, New Delhi, Symbiosis University, Pune, KJSIOM, Mumbai, VGSOM, IIT Kharagpur, Ernst & Young Trivandrum. He has published paper on Integrating Alternate Payment Channels and was presented in The Fourth International Conference on Payment Channels organized by Banknet India, Mumbai. His paper on Strategic Business Decision for Managers – An approach to ERP Evaluation was presented at conference on Role of Decision Making in Management organized by IMT Nagpur. The paper was then published as a chapter in a book Role of Management Science in Decision Making published by Excel India Publishers, New Delhi. It is also used as a text book.

PROGRAMME SCHEDULE

| DAY & DATE | SESSIONS | CONTENTS | SUGGESTED READING | FACULTY |
|---------------------|--|--|---|-----------------------|
| DAY 1 16.03.2020 | 10:00 am - 5:00 pm | Data Analytics for Business, Mapping Chart for Analytics Outcome | Case studies and data shall be provided | Dr. Tanushri Banerjee |
| DAY 2 17.03.2020 | 10:00 am - 5:00 pm | Analytical methods for Parametric and Non-Parametric Data | Provided by faculty | Saurabh Agarwal |
| DAY 3 18.03.2020 | 10:00 am - 5:00 pm | Analytical methods for Complex data | Provided by faculty | Saurabh Agarwal |
| DAY 4 19.03.2020 | 10:00 am - 5:00 pm | Data Mining methods in Business Analytics | Case studies and data shall be provided | Dr. Tanushri Banerjee |
| DAY 5 20.03.2020 | 10:00 am - 5:00 pm | Communicating statistical outcomes by building business dashboards | Provided by faculty | Dr. Tanushri Banerjee |
| Pedagogy | Case studies requiring business problem solving will be discussed. Hence data shall be provided to participants for building models for data analysis, mining and dashboards. All participants shall come with their laptops. Joint Certificate of participation from SPM PDPU and Statcraftshall be provided to all registered participants who undergo the programme. | | | |

Textbook: Business Analytics: Text and Cases by Tanushri Banerjee and Arindam Banerjee by Sage Publications India Pvt Ltd. ISBN: 9789353287108

