	BA for Industries & Functional Areas	L	T	P	C
Version 1.0					
Pre-requisites/Exposure					
Co-requisites					

Unit No. 1: Introduction to Business Analytics and Optimization
Introduction to Business Analytics and Optimization, Types of Analytics, Business Analytics value model - e.g. Higher education, Challenges - Volume, Variety (Diversity), and speed of Data Creation (and needed decisions), Approaches to help maximize profitability and returns, Business Analytics, Business Analytics Capabilities, Enterprise Analytics Capabilities, Business Analytics Technologies, Predictive Analytics, Prescriptive Analytics, Cognitive analytics – Watson breaks the glass ceiling, A fact-based decision making culture, A strong data infrastructure, The Right Analytical Tools, New tools and architectures may be needed, Analytics Workforce, Knowledge Requirements, Business Analyst, Data Scientist, Where to put the analytics team, IBM Business Analytics Maturity Model, Optimization, Key BAO Concepts, The need for BAO now, Essential Capabilities In BAO, BAO Capabilities: Business Performance Management, BAO Capabilities: Predictive Analysis and Mining, Value of BAO to Business Organization, Impact of BAO on diverse industries, Advantages to implementing BAO solutions, BAO Capabilities: Real-time Analytics: Data In Motion, BAO support for decision-making, High level architecture of BAO, Importance of reference architecture, BAO reference architecture, BAO reference architecture to BAO architects, IBM Technology Portfolio for BAO.

Unit No. 2. Business Analytics for the Banking Industry
The application of Business Analytics Solutions against common Business, scenarios/problems/issues in Banking Arena, business Analytics for Banking Case Studies (IBM Customer References), the process of developing Business Analytics Solutions for other banks.

Unit No. 3. Business Analytics for the Insurance Industry
The application of business analytics solutions against common Business, scenarios/problems/issues in the Insurance Arena, Business Analytics for Insurance Case Studies (IBM Customer References), the process of developing Business Analytics Solutions for other Insurance Companies

Unit No. 4. Business Analytics for the Telecom Industry
The application of business analytics solutions against common Business, scenarios/problems/issues in the Telecom Arena, Business Analytics for Telecom Case Studies (IBM Customer References), the process of developing Business Analytics Solutions for other Telecom Companies.

Unit No. 5. Business Analytics for Healthcare
The key healthcare trends & business challenges, key BA value propositions to healthcare industry pain points, the key healthcare industry play assets, the key differentiators within the context of critical healthcare industry pain points.

Unit No. 6. BA for Sales & Marketing

Analytics in sales and marketing – Introduction, Key questions by marketing functions, Marketing imperatives, Empowered customer challenge, CXO focus and views surveyed, ROI as a measure, Empowered consumers challenge, Customer analytics linkage to business applications, Analytics drive business applications,

Analytics for the results-driven marketer, Customer insight, Smart marketing functions through analytics, Demand generation by smart analytics, Business analytics for demand generation solutions, Demand generation – Response driven by analytics, Business analytics for customer acquisition, IBM solution: Customer acquisition for marketing, Acquiring the ideal customer, Segmentation strategies, Targeting those most likely to respond, Online customers acquisition – Delivering a smarter shopping experience, Align and understand the data, anticipate and predict, Case study: Resource allocation, Case study 2: Effective targeting, Benefits of customer analytics solutions, Smart marketing operations through analytics, Maximizing ROI and identifying best performing offers, Business analytics for marketing operations, Marketing performance analytics, Marketing performance indicators, "What if" scenario modeling for optimized resource allocation, Case study: Marketing performance analytics.

Unit No. 7. Human Resource Analytics

Human resources and challenges, Human resource analytics, HR analytics – Some of the key areas & insights, Solution area 1: HR analytics – Talent management, Human capital source of economic value, Effectiveness of building capabilities, Challenges of infrastructure, Usage of workforce analytics, Analytics is a key enabler, Use analytics to acquire, grow and retain, HR information in analytical process, Solution area 2: HR analytics – compensation & benefits, Compensation and benefits- Challenges, Alignment with key business processes, Analytics enable compensation management, Analytics in compensation process, Case study – Getty images, Case study – Mitel networks, Solution area 3: HR analytics – Workforce attrition, Human capital management, Workforce Attrition insights, HR survey– Data collection IBM SPSS, Cognos integration – Publishing in one step, Data Mining – Combine data sources, Data mining – Clustering, Data mining – Predict attrition, Data mining – Publish results to Cognos, Cognos integration – Creating a report, The dashboard, Predictive analytics – Anticipating potential attrition scenarios.

Unit No. 8. Financial Analytics

Role of CFOs to make the company smarter, Factors influencing the challenges faced by the companies, Role of CFOs in company, Agenda of CFO, Need for the core finance capabilities, Four finance profiles, Three key themes emerged from examining the four profiles, Challenges related to the automation and standards, Advantages of standard adoption, Steps to improve the corporate performance, Second key themes emerged from examining the four profiles, Challenges faced due to business insights, Business insight contribution, Business insight accelerators, Third key themes emerged from examining the four profiles, Value integrators effectiveness, Business insight leading to higher value, Characteristics of value integrators, Financial Analytics: Solutions Landscape, Importance of financial and predictive analytics, IBM solution to integrate the CFO performance insights, CFO performance insight – Solution architecture, CFO performance insight-Finance scorecard metrics, Metrics coverage of value drivers, CFO performance insight-executive dashboard, Standard GL/AR/AP reports, Standard financial reports, CFO performance insight- Risk status indicator, Key risk indicators provide early warnings to potential weaknesses, CFO

performance insight – "What-If" analysis, CFO performance insight- predictive analysis, CFO performance insight– Temporal Causal Modeling (TCM), Case study – BBVA, Case study – Muller Inc.

Unit No. 9. Case Studies

Case study – Cross-selling in the call center, Case study – Generating higher returns on marketing campaigns, Case study – XO communications, Case study – Telecom churn prediction, Case study – FBTO, Case study – WAZ Media Group, Case study – Home Trust, Fortis bank of Turkey, Case study – A large commercial bank in Japan, Case study – Large life insurance provider in Korea, Case study – Home furnishing retailer, Case study – Vimpel Com, Case study – KPN, Case study – Redcats, Case study – Marketing performance analytics, Customer profitability analytics for banking, Case study – Banco Itau, Case study – Mater, Case study – European government agency, Case study – AUVA, Case study – Mitel networks, Case study – Getty images, Case study – Elavon, Case study – Convenience store chain, Case study – PepsiCo, Case study – Chickasaw nation division of commerce, Case study – ANCAP, Case study – Jabil circuit, Inc., Case study – US food flavoring manufacturer.