Course Code	UDS21D01J	Course Name	ADVANCED ANALYTICS AND DATA VISUALIZATION FOR ENTERPRISE	Course Category	D	Discipline Specific Elective	L	T	P	C
							4	0	2	5

Pre-requisite Courses	Nil	Co-requisite Courses	Nil	Progressive Courses	Nil
Course Offering Department		Computer Applications	Data Book / Codes/Standards	Nil	

Course Learning Rationale (CLR): The purpose of learning this course is to,

		Learning			Program Learning Outcomes (PLO)														
		1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15

CLR-1 :	To make the participants learn how to make sense of data by creating informative and engaging reports and dashboards.
CLR-2 :	To provide the participants with the ways of analyzing the data in a better way, create visual representation of data that helps companies increase their profits through better analysis and better business decisions
CLR-3 :	To teach the participants with one of the leading data visualization tool used in the market for data analysis and prediction called SAP SAC.
CLR-4 :	To let the participants provide with the details of Creating Stories that are main part of SAP Analytics to explore data and to find deep insight using charts and tables.
CLR-5 :	To educate the participants about some of best practices to keep Analytics Designer running smoothly.
CLR-6 :	To provide the participants with main innovations that are present in SAP Analytics Cloud (SAC) for planning.

Course Learning Outcomes (CLO): At the end of this course, learners will be able to:	Level of Thinking (Bloom)	Expected Proficiency (%)	Expected Attainment (%)	Fundamental Knowledge	Application of Concepts	Link with Related Disciplines	Procedural Knowledge	Skills in Specialization	Ability to Utilize Knowledge	Skills in Modeling	Analyze, Interpret Data	Investigative Skills	Problem Solving Skills	Communication Skills	Analytical Skills	ICT Skills	Professional Behavior	Life Long Learning
CLO-1 : Have a strong hands-on skills knowledge and expertise in transforming data into more useful visuals with the use of charts and visuals.	2	85	80	H	H	H	H	H	H	H	H	H	M	M	H	H	H	H
CLO-2 : Get a strong hands-on skill, knowledge and expertise in creating beautiful stories that are an integral part of SAP analytics	3	85	80	H	H	H	H	H	H	H	H	H	M	M	H	H	H	H
CLO-3 : Get a strong hands-on skill, knowledge and expertise in creating beautiful stories using analytical applications that are an integral part of SAP analytics	3	85	80	H	H	H	H	H	H	H	H	H	M	M	H	H	H	H
CLO-4 : Be introduced to the scripting world in SAP analytics for cloud for creating analytical applications	3	85	80	H	H	H	H	H	H	H	H	H	M	M	H	H	H	H
CLO-5 : Use a hybrid solution where SAC serves as a front-end on top of your BPC backbone called Financial Planning in SAP SAC.	3	85	80	H	H	H	H	H	H	H	H	H	M	M	H	H	H	H
CLO-6 : Use all three types of Smart Predict scenarios– Classification, Regression & Time-Series – provided by SAC to address prediction on different business use cases	3	85	80	H	H	H	H	H	H	H	H	H	M	M	H	H	H	H

S-	SLO					
S-10	SLO-2	Tailor made Reports	Graphs	**Unit 9: Creating Stories using Analytic Application in SAP SAC**	Modifying the Custom Widget	Business Benefits of Predictive Analytics in SAP SAC
S-11 & S-12	SLO-1 / SLO-2	Lab 2 :	Lab 5 :	Lab 8:	Lab 11:	Lab 14:
S-13	SLO-1	**Unit 3: What Does the Future Hold for Visualizing Data**	Maps	Analytic Application in SAP SAC Overview	**Unit 12: Scripting in SAP SAC Analytic Applications**	Steps to implement Predictive modelling in SAP SAC
	SLO-2	Future of Data Visualizations	Infographics	Create a New Analytic Application	SAP SAC Best Practices	Identify the ML Scenario
S-14	SLO-1	Location Based Analysis	Dashboards	Changing the Name of Widgets	Consider your audience	Data Acquisition
	SLO-2	Storytelling will become crucial	**Unit 6: Types of Data Visualization**	Adding Comments to Widgets and Table Cells	Determine your goals	Data Acquisition
S-15	SLO-1	Interactive Dashboards	SAP Analytics for Cloud Overview	Working with the Comment Widget in an Analytic Application	Choose relevant KPIs	Data Discovery
	SLO-2	Data Visualizations for everyone	Features of SAP SAC	Copying and Pasting Widgets and Scripting Objects	Tell a story with your data	Data Processing
S-16	SLO-1	**Unit 4: Techniques and Best Practices Techniques**	Business Benefits of SAP SAC	Copying and Pasting Widgets from Story to Analytic Application	Provide context	Model Creation
	SLO-2	Data Visualization techniques Overview	Key Capabilities of SAP SAC	Restoring Deleted Widgets or Scripting Objects	Pall the right information on the page	Generating Predictions
S-17 & S-18	SLO-1 / SLO-2	Lab 3:	Lab 6:	Lab 9:	Lab 12:	Lab 15:

Learning Resources	**Text books:** 1. Data Visualization: a successful design process by Andy Kirk Publisher(s): Packt Publishing link : https://www.oreilly.com/library/view/data-visualization-a/9781849693462/ 2. SAP Analytics Cloud by Abassin Sidiq publisher : SAP press with Rheinwerk publisher	**References:** 1. The Truthful Art: Data, Charts, and Maps for Communication by Alberto Cairo Publisher(s): New Riders 2. Learning SAP Analytics Cloud by Riaz Ahmed Publisher(s): Packt Publishing

Learning Assessment

	Bloom's Level of Thinking	Continuous Learning Assessment (50% weightage)								Final Examination (50% weightage)	
		CLA – 1 (10%)		CLA – 2 (10%)		CLA – 3 (20%)		CLA – 4 (10%) #			
		Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice	Theory	Practice
Level 1	Remember / Understand	20%	15%	20%	15%	20%	15%	20%	15%	20%	15%
Level 2	Apply / Analyze	20%	20%	20%	20%	20%	20%	20%	20%	20%	20%
Level 3	Evaluate / Create	10%	15%	10%	15%	10%	15%	10%	15%	10%	15%

	Total	100 %	100 %	100 %	100 %	100 %

CLA – 4 can be from any combination of these: Assignments, Seminars, Tech Talks, Mini-Projects, Case-Studies, Self-Study, MOOCs, Certifications, Conf. Paper etc.,

Course Designers

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