

Course Code	UDS21D03T	Course Name	DIGITAL TRANSFORMATION	Course Category	D	Discipline Specific Elective	L	T	P	C
							4	0	0	4

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)
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CLR-1 :	Enable the participants hone their skills, tools, and techniques to lead digital transformation in an business Organization	1	2	3	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
CLR-2 :	To Inculcate the principles of digital business models, rapid innovation, and data-driven thinking.																		
CLR-3 :	Get Exposed to gaining leadership skills to navigate an era of technology shifts and disruptive business models																		
CLR-4 :	Able to deliver methodologies for organizations to deconstruct their value chain to gain a competitive advantage over their competitors																		
CLR-5 :	Look into the major business drivers of digital transformation, opportunities they create and opportunities they have already created, the challenges they bring to the table																		
CLR-6 :	Methodically explain the framework fundamental duality and the different enablers of digital transformation.																		

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 :	Create a system for correct data gathering and incorporating it at a higher level for business intelligence.	2	85	80	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H
CLO-2 :	Have excellent skills and knowledge to lead process innovation and efficiency across units	3	85	80	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H
CLO-3 :	Understand the customer needs and building impactful insights that help a great deal in drive the business growth.	3	85	80	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H
CLO-4 :	Have excellent skills and knowledge for providing a great digital experience high customers expectations..	3	85	80	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H
CLO-5 :	Encourage digital culture with improved collaboartaion to help move the entire organization ahead digitally.	3	85	80	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H
CLO-6 :	Have excellent knowledge in processes helpingg to improve efficiency and profitability for business organizations undergoing digital transformation	3	85	80	H	H	H	M	H	H	H	H	H	H	H	H	H	H	H

Note: All our curriculum, study materials, assignments, quizzes, lab works, and learning resources are personalized and dynamically generated using machine learning models based on the learner's learning ability. Users can review our learning curriculum only through our intelligent learning management platform (iLMSP), and our learning resources and lab infrastructures are available only in the digital form on our cloud infrastructures.



Duration (hour)		12	12	12	12	12
S-1	SLO-1	<b>Unit 1: Digital Transformation Defined</b>	AI-digitized supply chains	Digital Transformation in Automobile	Internet Of Things	Building bridges between technologies
	SLO-2	Digital Transformation defined from academic perspective	Improved decision making and productivity	<b>Unit 5: Digital Transformation Business Cases</b>	Mobile	Bridging technologies and innovation
S-2	SLO-1	Digital Transformation defined from industry perspective	<b>Unit 3: Role of AI in Digital Transformation</b>	Creating a Roadmap	Augmented Reality	<b>Unit 10: Digital Transformation Implementation Framework</b>
	SLO-2	Business Benefits of Digital Transformation	How can AI be applied in the digital transformation process	Destination	Cloud Technology	What is a digital transformation implementation framework?
S-3	SLO-1	Business Challenges of Digital Transformation	AI-driven digital transformation	Means of getting to the destination	Artificial Intelligence and Machine Learning	Why do organizations need to digitally transform
	SLO-2	Role of Digital Transformation in AI	Challenges ahead	Key digital transformation activities	Digital Twin	The benefits of a digital transformation framework
S-4	SLO-1	Opportunities for Digital Transformation	Role of Augmented analytics	Main milestones	API Based Integration	Choosing the right digital transformation framework
	SLO-2	The Process of Digital Transformation	Role of Automation	Define Metrics	Robotic Process Automation	Things to avoid
S-5	SLO-1	Digital Business Models	Enhanced Consumer engagement and insights	User Lifetime Value	Additive Manufacturing	Things in return
	SLO-2	<b>Unit 2: Industry Demand and Business Needs for Digital Transformation</b>	AI-digitized supply chains	Inbound and outbound marketing performance	<b>Unit 8: Security and Data Privacy</b>	<b>Unit 11: Digital Transformation Implementation Framework</b>
S-6	SLO-1	Digital Transformation a window of future	Improved decision making and productivity	Customer Experience	Digital Transformation Strategy ✓ Process ✓ Model ✓ Domain ✓ Culture	Amazon Business - Improving Customer experience
	SLO-2	Business Drivers towards digital Transformation	<b>Unit 4: Role of Intelligent Automation and Data Science in Digital Transformation</b>	Use Organizational Change Management	Technology for digitally transforming business processes ✓ Team Collaboration ✓ CRM ✓ Storage ✓ Project Management ✓ Accounting ✓ Payroll ✓ Communication	Netflix – On-demand Subscription based video services
S-7	SLO-1	Digital Transformation across industries	Why are Businesses Undergoing Digital Transformations?	<b>Unit 6: Digital Transformation Business Cases</b>	How is data security at risk from digital transformation	Tesla Connected Car Technology



	SLO-2	Innovation from digital transformation	Future of Intelligent Automation Data Transformation	Destination	Mitigate data security risks	Glassdoor Recruitment
S-8	SLO-1	Competitive Edge over others	Future of Data science in Data Transformation	Means of getting to the destination	Investing in Privacy Tools	Under Armour Connected Fitness
	SLO-2	Changing Operational processes through digital transformation	How does Data Science Benefit to Business?	Key digital transformation activities	Ensuring Digital Transformation Strategy is Secure	<b>Unit 12: Digital Transformation Best Practices and Adoptions</b>
S-9	SLO-1	Changing organizational model	Authorizing decision-making via a data-driven approach	Main milestones	<b>Unit 9: Global Digital Deployment and Rollout Strategy</b>	Define of the business problem
	SLO-2	<b>Unit 3: Role of AI in Digital Transformation</b>	Classifying warnings, opportunities, and scopes via data-insights	Define Metrics	Review your strategy	Prioritize collaboration between teams
S-10	SLO-1	How can AI be applied in the digital transformation process	Adding more values with Machine learning	User Lifetime Value	Components for deploying your strategy	Ensure a culture that allows for change
	SLO-2	AI-driven digital transformation	<b>Unit 5: Real-World Applications of Digital Transformation</b>	Inbound and outbound marketing performance	Building Bridges between IT and the Business	Ensure a culture that allows for change
S-11	SLO-1	Challenges ahead	Digital Transformation in Healthcare	Customer Experience	Building bridges between the business and information/processes	Introduce a corporate governance system
	SLO-2	Role of Augmented analytics	Digital Transformation in Retail	Use Organizational Change Management	Building bridges for actionable intelligence	Look through the perspective of customers or users
S-12	SLO-1	Role of Automation	Digital Transformation in Energy	<b>Unit 7: Digital Transformation Technologies and Infrastructure</b>	Building human bridges in a digital transformation strategy	Take risks and try new methods
	SLO-2	Enhanced Consumer engagement and insights	Digital Transformation in Oil and Gas	Big Data And Real-Time Analytics	Bridges to build new ecosystems	Mind the technology legacy cost

Learning Resources	<ol style="list-style-type: none"> <li><a href="https://deepsphereai.litmos.com/">https://deepsphereai.litmos.com/</a></li> <li>Jyothi R. Korem, Srinivas R. Pingali, Shankar Prakash, (2021), "Digital Transformation Strategies - Theory and Practice, SAGE publishing, 2021</li> <li>Daniel R. A. Schallmo, Christopher A. Williams, (2018), "Digital Transformation Now! - Guiding the Successful Digitalization of Your Business Model", Springer, 2018</li> <li>Alp Ustundag, Emre Cevikcan, (2017), "Industry 4.0: Managing The Digital Transformation", Springer Series in Advanced Manufacturing</li> <li>Alexander Borek and Nadine Prill, (2020), Driving Digital Transformation through Data and AI, Kogan Page</li> </ol>
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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	40%	-	40%	-	40%	-	40%	-	40%	-
	Understand										



Level 2	Apply	40%	-	40%	-	40%	-	40%	-	40%	-
	Analyze										
Level 3	Evaluate	20%	-	20%	-	20%	-	20%	-	20%	-
	Create										
	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		
Experts from Industry	Experts from Higher Technical Institutions	Internal Experts
Mr.Jothi, Periyasamy , Chief AI Architect DeepSphere AI, CA, USA	Dr.S.Gopinathan, Associate Professor, University of Madras, Chennai	Dr.S.Albert Antony Raj, SRMIST
		Dr. B Rebecca Jeyavadhanam, SRMIST