Annexure I: Course Curriculum				
MODULE-WISE COURSE CONTENT AND OUTCOME				
SL.NO	MODULE NAME	MODULE CONTENT	MODULE LEARNING OUTCOME	DURATION (HRS)
1	About PLM	Introduction of PLM Introduction to the Windchill Environment	• Define PLM (Product Lifecycle Management) • Recognize the Benefits of PLM • Understand PLM Components	10
2	About Windchill UI	Locating Information Viewing Information	• Search for Data Efficiently • Browse the Database • Utilize Advanced Search Options • View Product Data • Understand Information Layouts • Navigate Linked Data • Use Visualizations	
3	About Visualization	Introduction to Visualization Using Creo View Lite to View and Annotate Information	• Navigate Creo View Lite Interface • Perform Basic Viewing Tasks: o Rotate, zoom, and pan 3D models for detailed inspection. • Open and navigate 2D technical drawings. • Use Markup Tools for Annotation: o Add comments, dimensions, and graphical annotations to CAD models or drawings. • Save and share annotations with team members for collaborative review.	
4	About Home page	Managing Your Work Participating in Processes	• Organize Assigned Tasks • Manage Personal Workspaces • Track Progress • Perform Basic Workflow Tasks • Understand Workflow Processes • Engage in Collaborative Processes	

			• Execute Process-Related Tasks • Monitor Workflow Status	
5	About Document	Creating Documents Managing Documents Managing Lifecycle for Document Managing Revision for Document	• Gain confidence in creating, organizing, and managing documents in Windchill. • Understand and apply document lifecycle stages for structured management. • Effectively handle document revisions to maintain consistency and traceability. • Develop skills for integrating documents into broader workflows and ensuring their role in successful PLM operations.	8
6	About CAD Data Management	Windchill MCAD Data Management Process Overview Manage Design Data Manage Design Development Manage CAD Data Working With CAD Data Manage Family Tables	• Gain a comprehensive understanding of MCAD data management processes in Windchill. • Build skills to organize, control, and collaborate on CAD data effectively. • Understand and utilize advanced features like family tables for managing complex design variations. • Develop proficiency in integrating CAD tools with Windchill to enhance productivity and reduce errors.	15
7	About BOM	Windchill eBOM Creation Process Overview Create eBOM Edit BOM Manage eBOM Generate and Compare BOM Reports Sharing and exporting eBOM	• Develop a strong understanding of eBOMs and their role in managing product designs. • Gain the ability to create, edit, and manage eBOMs efficiently in Windchill. • Build skills in generating reports, analyzing BOM data, and sharing eBOMs for collaborative purposes. • Lay a foundation for integrating eBOMs into broader enterprise	

			processes like ERP or manufacturing planning.	
8	About Change Management	Change Management Process Overview Identify Need Investigate Need Change Planning Change Implementation Review and Audit Change	• Develop a clear understanding of the change management process and its significance in maintaining product and process integrity. • Acquire skills to identify, investigate, plan, implement, and review changes systematically using Windchill. • Enhance collaboration and decision-making through effective communication and stakeholder engagement. • Build proficiency in auditing changes and leveraging insights to improve organizational processes.	12

Annexure II: Use Cases and Test Projects			
OVERALL COURSE LEARNING OUTCOME ASSESSMENT CRITERIA AND USECASES			
LEARNING OUTCOME	ASSESSMENT CRITERIA	PERFORMANCE CRITERIA	USECASES
Windchill Configuration	• Document Management Configuration • MCADE Data Management Configuration • EBOM Configuration • Configure change management	• Types of document creation and maintenance • Complete CAD model creation and maintenance • Create EBOM for CAD model • Configure change management for document • Promotion request for CAD Document	1.Document Management Configuration • Define Document Types and Templates: • The company configures various document types within Windchill, such as "Technical Specifications," "Test Reports," "Assembly Instructions," and "Engineering Change Orders." • Custom templates are created for each document type to ensure consistency in format and metadata (e.g., title, revision, document status, project code, and approval workflow). 2. MCAD Data Management Configuration Configure CAD Data Management Settings: Windchill is configured to integrate with Creo (or other MCAD software used by the company) to store and manage CAD files, including parts, assemblies, and drawings. The configuration ensures that CAD files are linked to product structures and documents in Windchill, with automatic generation of metadata such as part numbers, materials, and revisions. 3. eBOM Configuration Define eBOM Structure: The company configures

			Windchill to automatically generate engineering Bills of Materials (eBOM) from CAD models. The eBOM structure is configured to reflect the company's product structure (e.g., top-level assemblies, subassemblies, components). Windchill automatically assigns part numbers, descriptions, and materials to each item in the eBOM based on the data in the CAD models and product specifications. 4. Configure Change Management Create Change Request and Change Notice Workflows: The company configures the change management process in Windchill, defining workflows for both engineering change requests (ECR) and change notices (ECN). A change request workflow is created where an engineer can propose a change (e.g., to a design document or CAD model).

LIST OF FINAL PROJECTS (PROJECTS THAT COMPREHENSIVELY COVER ALL THE LEARNING OUTCOME)	
SL.NO	FINAL PROJECT
1.	Document Management for SKADRO
2.	MCADE Data Management for SKADRO
3.	EBOM Configuration for SKADRO
4.	Configure change management for SKADRO

COURSE ASSESSMENT RUBRICS (TOTAL MARKS: 70)				
ASSESSMENT CRITERIA	DESCRIBE THE CRITERIA OF THE BELOW CATEGORY PERFORMANCE			TOTAL MARKS
	FAIR	GOOD	EXCELLENT	
Practical Skills Proficiency	10	15	15	15
Technical Knowledge Application	5	10	15	15
Project Execution	10	20	25	25
Communication and Reporting	5	10	15	15

Annexure III: Assessment Rubrics