

ANNEXURE A4

INDIAN INSTITUTE OF INFORMATION TECHNOLOGY DESIGN AND MANUFACTURING (IIITD&M) KANCHEEPURAM

Course Title	Reverse Logistics management	Course No			
Specialization		Structure (IPC)	3	0	3
Offered for	M.Tech, M.Des, Ph.D	Status	Core <input type="checkbox"/>	Elective <input checked="" type="checkbox"/>	
Course Objectives	Introducing students to key theoretical dimensions of reverse logistics (RL); analyzing regulatory, technological, and environmental dimensions of RL				
Course Outcomes	<p>Upon completing this course, students should be able to:</p> <p>Understand the theoretical foundations of RL</p> <p>Optimize the RL network</p> <p>Understand the benefits of Reuse, Re-manufacturing and Recycle.</p> <p>Balance a disassembly line in RL</p>				
Contents of the course <i>(With approximate break up of hours)</i>	<p>Defining RL; The development of RL; The main trends and Dimensions of RL networks, Issues and Challenges in Reverse Logistics (4)</p> <p>Reactive and efficient supply chain; Returns of products initiated during production, distribution, and by end customers; Other reasons for returning the product. (6)</p> <p>Introduction to Product Recovery Network, Classification of Recovery Networks, Product Recovery Network Types, Vehicle Routing Issues (6)</p> <p>Inventory Systems with Reverse Logistics: Characteristics of Recoverable Inventory Management, Inventory Models in RL, Deterministic Models, Stochastic Periodic Review Models (10)</p> <p>Modeling Supplier Selection in Reverse Supply Chains (4)</p> <p>Introduction to Disassembly Line Balancing in Closed-loop Supply chain (6)</p> <p>Case Studies (4)</p>				
Text and References	<p>Text Books</p> <ol style="list-style-type: none"> Surendra M. Gupta, Reverse Supply Chains: Issues and Analysis, CRC Press 2013. ISBN 9781439899038 Moritz Fleischmann, Quantitative Models for Reverse Logistics, Springer, 2001, ISBN 978-3-540-41711-8 <p>Reference Book</p> <ol style="list-style-type: none"> Mark E. Ferguson and Gilvan C. Souza, Closed-Loop Supply Chains, CRC Press, 2016 ISBN 9781420095265 				
Name of the	Dr. B. SHAHUL HAMID KHAN				

Proposer	
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