

	<h1 style="color: red; margin: 0;">MITS</h1> <h2 style="color: blue; margin: 0;">MADANAPALLE INSTITUTE OF TECHNOLOGY & SCIENCE</h2> <p style="color: red; font-size: small; margin: 0;">(Deemed to be University under section 3 of UGC Act, 1956)</p>		
	12. 3 Annexure - Life Cycle Perspective		
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12.3 Annexure - Life Cycle Perspective

Table A3.1: Life cycle perspective of the activity/product/services

Activity/Product/Services	Life cycle perspective
Utilization of High Tension Electricity Supply from Electricity Board	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Design: In accordance and compliance with the standard and guidelines from Andhra Pradesh Electricity Regulatory Commission (APERC) & DISCOM requirements</p> <p>Transportation: Through armored power cables</p> <p>Use: Operation of electrical and electronic products</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimize the landfill</p>
Operation of Gensets	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Design: In accordance and compliance with the standard and guidelines from CPCB & SPCB requirements</p> <p>Transportation: Through armoured power cables</p> <p>Use: Operation of electrical and electronic products</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>
Generation of Electricity through Solar	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Design: In accordance and compliance with the standard and guidelines from NREDCAP & DISCOM requirements</p> <p>Production: Electricity</p> <p>Transportation: Through armored power cables</p> <p>Use: Operation of electrical and electronic products</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>
Regulation of indoor temperature using Air conditioner (Individual Unit)	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Production: Cool air</p> <p>Use: Regulation of indoor temperature</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>



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Activity/Product/ Services	Life cycle perspective
Operation of Lift	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Use: Facilitation of vertical transport</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>
Groundwater Extraction	<p>Acquisition of raw materials: Purchase of materials from certified vendors (motors, pumps)</p> <p>Use: Water supply (Domestic and drinking purpose)</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of components to certified and minimise the landfill</p>
Water Treatment - RO	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Design: Accordance with the standard requirements ISO16240:2015 and IS10500:2012</p> <p>Production: Treated and rejected water</p> <p>Use: Drinking purpose, Reject water – Plate washing, Flushing</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of components to certified and minimise the landfill</p>
Wastewater Treatment - STP	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Design: In accordance with the standard requirements NGT(PB) O.A. 1069-2019</p> <p>Production: Treated waste water</p> <p>Use: Gardening and irrigation activities, Bus Service station</p> <p>End of life treatment: Determination of obsolete components and sludge</p> <p>Final disposal: Disposal of components to certifies vendors, minimise the landfill and disposing the sludge safely</p>
Rain Water Harvesting	<p>Design: Optimum design as per the building terrace dimension</p> <p>Use: Increase in ground water Quality and Quantity</p> <p>End of life treatment: Determination of service life</p> <p>Final disposal: Disposal to landfill/recreational purpose</p>



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Storm Water Drainage	<p>Design: Optimum design to capture the storm water</p> <p>Use: Decrease in soil erosion and Prevention from floods</p> <p>End of life treatment: Demolition and reconstruction</p> <p>Final disposal: Disposal of components to certified vendor and minimise the landfill</p>
Solid Waste Management	<p>Acquisition of raw materials: Purchase of materials for the activities related solid waste management from certified vendors</p> <p>Use: To maintain clean surroundings in the campus</p> <p>End of life treatment: Determination of recyclable material</p> <p>Final disposal: Disposal to recyclers and minimise the landfill</p>
Hazardous & Other Wastes Management	<p>Acquisition of raw materials: Purchase of primary and secondary collection and storage barrels from certified vendors</p> <p>Use: To dispose the hazardous waste as per the compliance requirements of SCPB and CPCB</p> <p>End of life treatment: Determination of used oils and chemicals</p> <p>Final disposal: Disposal to APPCB authorized hazardous waste management recyclers</p>
Food Production in the Mess and Canteens	<p>Acquisition of raw materials: Purchase of materials, machineries and cooking utilities for the activities cooking from certified vendors</p> <p>Production: Food as per the compliance of Food Safety and Standards (Organic Foods) Regulations, 2017</p> <p>End of life treatment (machineries and cooking utilities): Determination of scrap materials and food waste from mess</p> <p>Final disposal: Used for the Biogas plants and minimise the landfill</p>
Food Production in Food Courts	<p>Acquisition of raw materials: Purchase of materials, machineries and cooking utilities for the activities cooking from certified vendors</p> <p>Production: Food as per the compliance of Food Safety and Standards (Organic Foods) Regulations, 2017</p> <p>End of life treatment (machineries and cooking utilities): Determination of scrap materials and food waste from food courts</p> <p>Final disposal: Used for the Biogas plants and minimise the landfill</p>



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Activity/Product/ Services	Life cycle perspective
Horticulture Activity	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>End of life treatment: Determination of broken branches and dry leaves</p> <p>Final disposal: Shredded and reused in the compost process</p>
Firefighting System	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Use: To put off the fire</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>
Operation of Transportation Services	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Use: Fleet operations</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>
Housekeeping Activities	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Use: Clean (campus) environment</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>
Civil Maintenance Activities and MEP Services	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>Use: Civil works and MEP services</p> <p>End of life treatment: Determination of obsolete components</p> <p>Final disposal: Disposal of the components to certified vendor and minimise the landfill</p>



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Academic, administrative, research, hostel, quarters, and maintenance services	<p>Acquisition of raw materials: Purchase of machineries, electronic products, consumables and stationaries from certified vendors</p> <p>Use: Utilization of the materials for functioning of academic, administrative, and maintenance services</p> <p>End of life treatment: Determination of scrap materials</p> <p>Final disposal: Disposal to scrap vendor and minimise the landfill</p>
Procurement	<p>Acquisition of raw materials: Purchase of materials from certified vendors</p> <p>End of life treatment: Determination of scrap materials</p> <p>Final disposal: Disposal to scrap vendor and minimise the landfill</p>