



**Northeast Wisconsin Technical College  
Course Linked Outcomes Matrices**

**10-481-109 057487 Commercial HVACR Systems Analysis**

**Employability Skills/Competency Matrix**

	Review heat transfer principles for buildings.	Describe thermodynamic processes in buildings.	Analyze the psychrometrics of HVACR systems.	Analyze the heating and cooling loads of buildings.	Analyze types of heating equipment for buildings.	Analyze types of cooling equipment for buildings.	Analyze types of duct systems for HVACR equipment in buildings.	Develop strategies to operate HVACR systems efficiently.	Analyze the vapor compression cycle of a refrigeration system.
Communicate Effectively									
Demonstrate Community and Global Accountability									
Demonstrate Personal Accountability									

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Think Critically and Creatively									
Value Individual Differences and Abilities									
Work Cooperatively and Professionally									

**Program Outcomes/Competency Matrix**

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TSA1 - Evaluate renewable, fossil and other energy resources in context of sustainability, environment, society and economics									
TSA2 - Evaluate building performance and energy use									
TSA3 - Recommend building/site solutions to optimize performance									
TSA4 - Install equipment and materials to optimize performance									
TSA5 - Service equipment and systems									
Write technical proposals for energy projects.									



