

# Academic Tutor Briefing Document

IE University – Capstone Project 2025

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## Project Information

- **Project Title:** Monetizing Climate Data: Unlocking Business Value from the GRIDMET Dataset
- **Corporate Partner:** Microsoft
- **Academic Period:** May–July 2025

## Overview of Student Contributions

Students will explore technical, analytical, and business strategies for monetizing the GRIDMET climate dataset. Their task is to transform open-access US meteorological data into scalable, revenue-generating solutions and services, targeted at public or private sector clients.

## Key Areas of Contribution

### 1. Climate Data Product Ideation

- Identify potential use cases or solutions using the GRIDMET dataset
- Align these solutions with specific customer profiles (e.g., agriculture, insurance, public health)

### 2. Technical Exploration and Modeling

- Analyze GRIDMET variables (e.g., precipitation, wind speed, temperature)
- Conduct EDA, baseline and target modeling (e.g., forecasting, anomaly detection)
- Optimize model performance based on KPIs and potential business value

### 3. Data Engineering and Documentation

- Select appropriate tools (e.g., Python with `xarray`, `zarr`, `pystac-client`)
- Build and document a scalable data pipeline
- Demonstrate transformations (filtering, aggregation) and ensure reproducibility

### 4. Business Strategy and ROI Framing

- Draft business cases with monetization potential
- Propose technical architectures for deployment

- Discuss legal/IP constraints and suggest governance models

## **Expected Business Impact**

- Prototype services that could generate new revenue streams
- Strengthen Microsoft's role in the climate data innovation space
- Validate feasibility and scalability of GRIDMET-based solutions