* ICE Framework (Instruction, Context, Example)
* RCR (Role, Constraints, Result)
* Chain of Thought prompting
* Temperature Control (specify creativity level where relevant)
* Taxonomy (grouping prompts into granular sub-domains)
* Task Prompts (clear action-oriented prompts)

🔬 Healthcare & Biomedical Collaboration

* **Sub-domain**: Clinical Trial Analysis & Pharma Partnerships
* **Prompt** (ICE + RCR + Chain of Thought):

You are a biomedical data strategist. Given clinical trial data on [disease area], analyze outcomes, identify success indicators, and match with top 3 pharmaceutical firms aligned with similar research pipelines.

Explain your reasoning step-by-step.

Output in table format (Company, Relevance Score, Justification).

* **Sub-domain**: Regulatory Compliance
* **Prompt** (Task Prompt + Chain of Thought):

Outline the EU Class IIb medical device approval pathway. Start with pre-clinical data collection, walk through documentation, timelines, and CE certification steps.

Think step-by-step. Focus on MedTech firms under 100 employees.\*

* **Sub-domain**: Translational Research Matchmaking
* **Prompt** (Taxonomy + RCR):

Act as an AI collaboration consultant.

Your task: match an academic research project in immunotherapy with 3 potential biotech partners using public funding databases. Include funding history, collaboration patterns, and strategic alignment.

⚙️ Manufacturing & Engineering

* **Sub-domain**: Automation Opportunities
* **Prompt** (ICE + Temperature Control):

You are a lean manufacturing expert. Identify 3 AI automation opportunities for an auto parts factory looking to cut waste by 15%. Be practical, not overly creative **(temperature: low)**. Consider sensors, predictive tools, and task-specific bots.

* **Sub-domain**: Predictive Maintenance
* **Prompt** (Task Prompt + Chain of Thought):

List and evaluate 3 AI-based predictive maintenance tools for mining machinery.

Think step-by-step: sensor compatibility, data modeling method, cost, success stories. Rate each from 1-5 based on fit for remote operations.

* **Sub-domain**: AI Workflow Development
* **Prompt** (RCR + Taxonomy):

As an AI workflow architect, draft a 5-step integration plan to use AI for supply chain demand forecasting in a global electronics firm.

Constraints:existing ERP system (SAP), data privacy compliance.

🌱 Sustainability & Green Tech

* **Sub-domain:** Partnership Discovery
* **Prompt** (ICE + Taxonomy):

Instruction: Identify top 5 EU-based startups in polymer recycling.

Context: Mid-size chemical company seeking partners.

Example Output**:** Name, Focus Area, TRL, Funding Status, Contact Lead.

* Sub-domain: Proposal Drafting
* Prompt (Chain of Thought + Task):

Write a 4-section proposal (Intro, Objectives, Method, Impact) for an AI tool to analyze and reduce carbon emissions in textile factories.

Think through measurable metrics and scalable architecture.

* Sub-domain: Ecosystem Mapping
* Prompt (RCR + Taxonomy + Chain of Thought):

**Act as a sustainability analyst.**

**Map Europe’s top 10 circular economy innovation hubs from 2020–2024. Use public funding data, patents filed, and startup density.**

**Output as:** City, Sector Focus, Funding Volume, Notable Startups

Tech & Innovation

* **Sub-domain**: Ethical AI
* **Prompt** (ICE + Chain of Thought):

Compare AI ethics frameworks from the EU, USA, and Singapore.

Context: Global AI partnership agreement.

Think: principles, enforcement, and conflict zones.

Output as a comparison matrix with citations.

* **Sub-domain**: Startup-Academia Partnership
* **Prompt** (Task + RCR):

Design a strategic partnership roadmap for a generative AI startup collaborating with a university NLP lab.

Constraints: 12-month timeline, limited funding.

Result: milestones, roles, KPIs, IP sharing terms.

* **Sub-domain**: Market Viability
* **Prompt** (Chain of Thought + ICE):

Assess the market viability of an AI-powered sentiment analysis tool for e-commerce.

Think: market size, competitors, pricing models, barriers to adoption.

Summarize using SWOT + TAM-SAM-SOM.

Academia-Industry Bridge

* **Sub-domain**: Research Translation
* **Prompt** (ICE + Role + Chain of Thought):

As a knowledge transfer officer, convert this abstract [INSERT TEXT] into a 150-word pitch for industry partners.

Step-by-step: identify key innovation, its application, commercial viability, and collaboration value.

* **Sub-domain**: Smart City Collaborations
* **Prompt** (RCR + Taxonomy):

Act as a smart city partnership advisor. Identify 5 private companies (IoT, telecom, infrastructure) likely to partner on smart urban development. Match with university capabilities. Output: Partner, Fit Reason, Previous Collaborations.

* **Sub-domain**: Funding Identification
* **Prompt** (ICE + Task Prompt):

List 5 international funding sources that support AI-based academic-industry partnerships in renewable energy.

Include: grant name, agency, eligibility, deadline, and link.