

e-tivity: Drying in Everyday Life – AI as a Sparring Partner

Objective: Apply knowledge of drying processes to everyday situations, practice the targeted use of AI tools, and reflect on the benefits and limitations of AI tools.

Task/Action: After watching the instructional videos on drying, it is now time to apply your knowledge in practice. This will help consolidate the course content and enable you to directly transfer your theoretical understanding into real-world applications.

1. Choose an everyday drying situation

Think of a situation from your everyday life (household, leisure activities, personal care, etc.) in which a drying process takes place. Create a new forum thread with a clear and meaningful title.

2. Describe your drying situation

- Assign the process to a type of drying (e.g. convective drying, contact drying).
- Describe the drying process from a chemical engineering perspective.
- Explain which physical factors cause the process to proceed faster or slower.

3. Use an AI tool

Use an AI tool (e.g. Academic AI, ChatGPT, Copilot, Gemini, etc.) and enter an appropriate prompt to have your drying situation explained.

4. Add a short reflection (approx. 5–7 sentences)

Address the following questions:

- How did I use AI? (e.g. which tool, which prompt)
- What result did I obtain and how do I evaluate it?
- How did I validate the result? (e.g. course materials, literature, personal observation)
- Which parts are based on my own experience or observation?

Response / Peer Feedback

- Read the contributions of your peers.
- Take on the role of a “final approval authority”: Would you approve this description as a basis for an operational process?
- Provide feedback:
 - Is the drying situation correctly classified and explained?
 - Where do you see ambiguities or opportunities for improvement?
 - Add your own observations if applicable.

Minimum requirements for a positive assessment of this e-tivity

- Creation of an individual forum thread with a meaningful title and a description of an everyday drying situation
- Engagement with the drying situation, including:
 1. Classification of the type of drying
 2. Process engineering description of the drying process
 3. Explanation of the physical factors influencing whether the drying process is more or less effective and faster or slower
 4. Reflection on the use of AI
- Written feedback on one peer's drying description from the perspective of a final approval authority in an industrial setting, prior to implementation

Tip: The more actively you engage in this e-tivity, the better your understanding of drying processes will be—and the less you will need to study for the final exam.