Table 2 – Tentative timeline *(draft)*

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| Year/sem |  |
| 2024/1 | *Paper: EDFM Review*  Define research scope.  Literature review on fracture physics.  Simulate homogenization of Biot parameters in fractured rocks.  Use the current FEM code to stress the fracture numerics. |
| 2024/2 | *Paper: Homogenization of Biot parameters*  Proof-test multiphase flow in EDFM (try Yifei’s code)  Write and defend the proposal.  Implement and validate fracture dynamics in an elastic environment (THM). |
| 2025/1 | Implement basic fracture branching.  Back-integrate with EDFM.  *Paper: Validation of the simulator, simple cases.* |
| 2025/2 | *Paper: Application: Fracture branching in heterogeneous media*  Implement fracture dynamics in a plastic environment.  Implement fracture dynamics with creep. |
| 2026/1 | *Paper: Application: fracture propagation in salt rock (caprock and caverns)*  Improve implementation and try to overcome limitations. |
| 2026/2 | Wrap up results.  Write dissertation. |
| 2027/1 | Wrap up dissertation. |