1. Orientation, choose subject
2. Problem analysis
3. Literature review
4. Design research method
5. Carry out your research
6. Analyse resultaten
7. Presenteren onderzoek

**Methode Nike:**
*Just do it!*

**Additionaal literature**

**Small prototype solution**

**Additional literature**
Phase 1 deliverables

Result of phase 1 (BSc thesis: research proposal; MSc thesis: Research Topics) is an action plan (Plan van Aanpak) with the following components:

- **Problem statement and analysis:** What is the problem to be solved? Why is it important? What are the research goals and questions to be tackled?
- **Literature Review:** What is known about this problem from the literature? (And why do existing solutions not work (well enough)?)
- **Small prototype solution (optional):** solution to a small subproblem or subcase that shows if the approach is feasible.
- **Research Method:** How will the research questions be tackled?
- **Planning:** What are deliverables/milestones and deadlines?

**Note 1:** a thesis project is **like any other** project, so standard project management techniques apply: formulate SMART goals, and appropriate time management

**Note 2:** the research plan should be transferable, i.e. it should be detailed enough so that someone else can carry out your plan.

**Note 3:** If your goal is to improve an existing solution (which is the case for many theses in CS), then **validation** the solution is crucial: formulate clear criteria which your solution should satisfy and compare your solution with existing ones: the research method should state how the validation takes place.
CRITERIA

- **Product**: scientific content of the research plan
  - Correctness: is the research plan technically correct?
  - Depth: how complex is the problem statement, analysis, literature review, research method?
  - Originality and creativity: how innovative are the problem statement, analysis, literature review?
- **Presentation**: the write-up of the research plan
  - Is the action plan well-written and clearly structured?
- **Process**:
  - Independence, proactiveness: did the student need a lot of guidance? How did the student process feedback?
  - Scientific attitude, reflection: does the student pose critical questions towards work by others and by himself/herself?