Weekly tracking sheets

Computer Science · 120 weeks · 6 semesters · 1201 h of coursework

Name: _____

Study partner: _____

Start date: ___ / ___ / _____

HOW TO USE

1. **Start of semester:** read the semester overview page and write down your goal.
2. **Sunday evening:** fill in the dates and the goal on the week's sheet.
3. **During the week:** tick each finished task and log your real time every day.
4. **Partner check-in:** explain one idea in 5 minutes without notes.
5. **End of week:** rate your skills; a skill is acquired when you can do it alone.
6. **Weeks 19 and 20:** finish the semester project and sign it off.

THE SIX SEMESTERS

S1 · Programming and algorithmic thinking
Year 1 · 177 h

S2 · Mathematics for computing
Year 1 · 207 h

S3 · C and Java
Year 2 · 168 h

S4 · Data structures and algorithms
Year 2 · 211 h

S5 · Software engineering
Year 3 · 210 h

S6 · Security, concurrency, the web and AI
Year 3 · 228 h

S1

YEAR 1 · FOUNDATIONS · 177 H · ≈ 8.8 H PER WEEK

Programming and algorithmic thinking

From ___ / ___ to ___ / ___

Learn to program in Python, from the first script to interactive programs, then tackle recursion, search and graphs.

SEMESTER PROGRAMME

Course	Length	Weeks	Done
Programming for Everybody (Getting Started with Python) Python for Everybody Specialization	17 h	W. 1–2	☐
Python Data Structures Python for Everybody Specialization	20 h	W. 2–5	☐
Using Python to Access Web Data Python for Everybody Specialization	19 h	W. 5–7	☐
Using Databases with Python Python for Everybody Specialization	14 h	W. 7–8	☐
Capstone: Retrieving, Processing, and Visualizing Data with Python Python for Everybody Specialization	9 h	W. 8–9	☐
An Introduction to Interactive Programming in Python (Part 1) Fundamentals of Computing Specialization	19 h	W. 9–12	☐
An Introduction to Interactive Programming in Python (Part 2) Fundamentals of Computing Specialization	16 h	W. 12–13	☐
Principles of Computing (Part 1) Fundamentals of Computing Specialization	19 h	W. 13–16	☐
Principles of Computing (Part 2) Fundamentals of Computing Specialization	16 h	W. 16–17	☐
Algorithmic Thinking (Part 1) Fundamentals of Computing Specialization	14 h	W. 17–19	☐
Algorithmic Thinking (Part 2) Fundamentals of Computing Specialization	13 h	W. 19–20	☐
The Fundamentals of Computing Capstone Exam Fundamentals of Computing Specialization	1 h	W. 20	☐

TARGET SKILLS

- ☐ Python variables, loops, functions and data structures
- ☐ Files, the web, APIs and SQLite databases
- ☐ Event-driven and object-oriented programming
- ☐ Testing, probability and combinatorics applied to programs
- ☐ Introductory search, recursion, graphs and complexity

SEMESTER PROJECT

The Fundamentals of Computing final exam, then a Python strategy game with a minimax AI and a test suite.

Signed off on ___ / ___ / _____

READING

- ☐ Python for Everybody
- ☐ Think Python, 3rd edition

MY GOAL FOR THIS SEMESTER

1

YEAR 1 · S1 · WEEK 1/20 · ≈ 8.8 H

Programming for Everybody (Getting Started with Python)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming for Everybody (Getting Started with Python) · start · ≈ 8.8 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Python variables, loops, functions and data structures	☐	☐	☐	☐
Files, the web, APIs and SQLite databases	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

2

YEAR 1 · S1 · WEEK 2/20 · ≈ 8.8 H

Programming for Everybody (Getting Started with Python)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming for Everybody (Getting Started with Python) · finish · ≈ 8.2 h
- ☐ Python Data Structures · start · ≈ 0.7 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Event-driven and object-oriented programming	☐	☐	☐	☐
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

3

YEAR 1 · S1 · WEEK 3/20 · ≈ 8.8 H

Python Data Structures

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Python Data Structures · continued · ≈ 8.8 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐
Python variables, loops, functions and data structures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

4

YEAR 1 · S1 · WEEK 4/20 · ≈ 8.8 H

Python Data Structures

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Python Data Structures · continued · ≈ 8.9 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Files, the web, APIs and SQLite databases	☐	☐	☐	☐
Event-driven and object-oriented programming	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

5

YEAR 1 · S1 · WEEK 5/20 · ≈ 8.8 H

Python Data Structures

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Python Data Structures · finish · ≈ 1.6 h
- ☐ Using Python to Access Web Data · start · ≈ 7.2 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

6

YEAR 1 · S1 · WEEK 6/20 · ≈ 8.8 H

Using Python to Access Web Data

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Using Python to Access Web Data · continued · ≈ 8.8 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Python variables, loops, functions and data structures	☐	☐	☐	☐
Files, the web, APIs and SQLite databases	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

7

YEAR 1 · S1 · WEEK 7/20 · ≈ 8.8 H

Using Python to Access Web Data

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Using Python to Access Web Data · finish · ≈ 2.9 h
- ☐ Using Databases with Python · start · ≈ 5.9 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Event-driven and object-oriented programming	☐	☐	☐	☐
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

8

YEAR 1 · S1 · WEEK 8/20 · ≈ 8.8 H

Using Databases with Python

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Using Databases with Python · finish · ≈ 8.1 h
- ☐ Capstone: Retrieving, Processing, and Visualizing Data with Python · start · ≈ 0.8 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐
Python variables, loops, functions and data structures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

9

YEAR 1 · S1 · WEEK 9/20 · ≈ 8.8 H

Capstone: Retrieving, Processing, and Visualizing Data with Python

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Capstone: Retrieving, Processing, and Visualizing Data with Python · finish · ≈ 8.2 h
- ☐ An Introduction to Interactive Programming in Python (Part 1) · start · ≈ 0.6 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Files, the web, APIs and SQLite databases	☐	☐	☐	☐
Event-driven and object-oriented programming	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

10

YEAR 1 · S1 · WEEK 10/20 · ≈ 8.8 H

An Introduction to Interactive Programming in Python (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ An Introduction to Interactive Programming in Python (Part 1) · continued · ≈ 8.9 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

11

YEAR 1 · S1 · WEEK 11/20 · ≈ 8.8 H

An Introduction to Interactive Programming in Python (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ An Introduction to Interactive Programming in Python (Part 1) · continued · ≈ 8.8 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Python variables, loops, functions and data structures	☐	☐	☐	☐
Files, the web, APIs and SQLite databases	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

12

YEAR 1 · S1 · WEEK 12/20 · ≈ 8.8 H

An Introduction to Interactive Programming in Python (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ An Introduction to Interactive Programming in Python (Part 1) · finish · ≈ 0.7 h
- ☐ An Introduction to Interactive Programming in Python (Part 2) · start · ≈ 8.2 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Event-driven and object-oriented programming	☐	☐	☐	☐
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

13 An Introduction to Interactive Programming in Python (Part 2)

YEAR 1 · S1 · WEEK 13/20 · ≈ 8.8 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ An Introduction to Interactive Programming in Python (Part 2) · finish · ≈ 7.8 h
- ☐ Principles of Computing (Part 1) · start · ≈ 1 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐
Python variables, loops, functions and data structures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

14

YEAR 1 · S1 · WEEK 14/20 · ≈ 8.8 H

Principles of Computing (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Principles of Computing (Part 1) · continued · ≈ 8.8 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Files, the web, APIs and SQLite databases	☐	☐	☐	☐
Event-driven and object-oriented programming	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

15

YEAR 1 · S1 · WEEK 15/20 · ≈ 8.8 H

Principles of Computing (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Principles of Computing (Part 1) · continued · ≈ 8.9 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

16

YEAR 1 · S1 · WEEK 16/20 · ≈ 8.8 H

Principles of Computing (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Principles of Computing (Part 1) · finish · ≈ 0.2 h
- ☐ Principles of Computing (Part 2) · start · ≈ 8.6 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Python variables, loops, functions and data structures	☐	☐	☐	☐
Files, the web, APIs and SQLite databases	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

17

YEAR 1 · S1 · WEEK 17/20 · ≈ 8.8 H

Principles of Computing (Part 2)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Principles of Computing (Part 2) · finish · ≈ 7.4 h
- ☐ Algorithmic Thinking (Part 1) · start · ≈ 1.4 h
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Event-driven and object-oriented programming	☐	☐	☐	☐
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

18

YEAR 1 · S1 · WEEK 18/20 · ≈ 8.8 H

Algorithmic Thinking (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Algorithmic Thinking (Part 1) · continued · ≈ 8.8 h
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐
Python variables, loops, functions and data structures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

19

YEAR 1 · S1 · WEEK 19/20 · ≈ 8.8 H

Algorithmic Thinking (Part 1)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Algorithmic Thinking (Part 1) · finish · ≈ 3.7 h
- ☐ Algorithmic Thinking (Part 2) · start · ≈ 5.2 h
- ☐ **Semester project**: The Fundamentals of Computing final exam, then a Python strategy game with a minimax AI and a test suite.
- ☐ Reading: Python for Everybody

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Files, the web, APIs and SQLite databases	☐	☐	☐	☐
Event-driven and object-oriented programming	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

20

YEAR 1 · S1 · WEEK 20/20 · ≈ 8.8 H

Algorithmic Thinking (Part 2)

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Algorithmic Thinking (Part 2) · finish · ≈ 7.8 h
- ☐ The Fundamentals of Computing Capstone Exam · ≈ 1 h
- ☐ **Semester project**: The Fundamentals of Computing final exam, then a Python strategy game with a minimax AI and a test suite.
- ☐ Reading: Think Python, 3rd edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Testing, probability and combinatorics applied to programs	☐	☐	☐	☐
Introductory search, recursion, graphs and complexity	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.8 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

S2

YEAR 1 · FOUNDATIONS · 207 H · ≈ 10.3 H PER WEEK

Mathematics for computing

From ___ / ___ to ___ / ___

> Learn to prove, count and reason about graphs, master basic linear algebra and the statistics modern computing needs.

SEMESTER PROGRAMME

Course	Length	Weeks	Done
Mathematical Thinking in Computer Science Introduction to Discrete Mathematics for Computer Science	42 h	W. 1–5	☐
Combinatorics and Probability Introduction to Discrete Mathematics for Computer Science	23 h	W. 5–7	☐
Introduction to Graph Theory Introduction to Discrete Mathematics for Computer Science	21 h	W. 7–9	☐
Number Theory and Cryptography Introduction to Discrete Mathematics for Computer Science	17 h	W. 9–10	☐
Delivery Problem Introduction to Discrete Mathematics for Computer Science	13 h	W. 10–12	☐
Linear Algebra: Linear Systems and Matrix Equations Linear Algebra from Elementary to Advanced	10 h	W. 12–13	☐
Linear Algebra: Matrix Algebra, Determinants, & Eigenvectors Linear Algebra from Elementary to Advanced	15 h	W. 13–14	☐
Linear Algebra: Orthogonality and Diagonalization Linear Algebra from Elementary to Advanced	9 h	W. 14–15	☐
Understanding and Visualizing Data with Python Statistics with Python	20 h	W. 15–17	☐
Inferential Statistical Analysis with Python Statistics with Python	22 h	W. 17–19	☐
Fitting Statistical Models to Data with Python Statistics with Python	15 h	W. 19–20	☐

TARGET SKILLS

- ☐ Proofs: induction, contradiction, invariants
- ☐ Combinatorics, discrete probability, graph theory
- ☐ Modular arithmetic and RSA cryptography
- ☐ Linear systems, matrices, eigenvalues
- ☐ Descriptive and inferential statistics in Python

SEMESTER PROJECT

UCSD's Delivery Problem project (travelling salesman), then a small RSA implementation with tests.

Signed off on ___ / ___ / _____

READING

- ☐ Mathematics for Computer Science
- ☐ Linear Algebra
- ☐ OpenIntro Statistics

MY GOAL FOR THIS SEMESTER

21 Mathematical Thinking in Computer Science

YEAR 1 · S2 · WEEK 1/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mathematical Thinking in Computer Science · start · ≈ 10.3 h
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Proofs: induction, contradiction, invariants	☐	☐	☐	☐
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

22 Mathematical Thinking in Computer Science

YEAR 1 · S2 · WEEK 2/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mathematical Thinking in Computer Science · continued · ≈ 10.3 h
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Modular arithmetic and RSA cryptography	☐	☐	☐	☐
Linear systems, matrices, eigenvalues	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

23 Mathematical Thinking in Computer Science

YEAR 1 · S2 · WEEK 3/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mathematical Thinking in Computer Science · continued · ≈ 10.3 h
- ☐ Reading: OpenIntro Statistics

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Descriptive and inferential statistics in Python	☐	☐	☐	☐
Proofs: induction, contradiction, invariants	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

24 Mathematical Thinking in Computer Science

YEAR 1 · S2 · WEEK 4/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mathematical Thinking in Computer Science · continued · ≈ 10.4 h
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐
Modular arithmetic and RSA cryptography	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

25 Mathematical Thinking in Computer Science

YEAR 1 · S2 · WEEK 5/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mathematical Thinking in Computer Science · finish · ≈ 0.6 h
- ☐ Combinatorics and Probability · start · ≈ 9.8 h
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Linear systems, matrices, eigenvalues	☐	☐	☐	☐
Descriptive and inferential statistics in Python	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

26

YEAR 1 · S2 · WEEK 6/20 · ≈ 10.3 H

Combinatorics and Probability

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Combinatorics and Probability · continued · ≈ 10.3 h
- ☐ Reading: OpenIntro Statistics

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Proofs: induction, contradiction, invariants	☐	☐	☐	☐
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

27

YEAR 1 · S2 · WEEK 7/20 · ≈ 10.3 H

Combinatorics and Probability

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Combinatorics and Probability · finish · ≈ 2.9 h
- ☐ Introduction to Graph Theory · start · ≈ 7.5 h
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Modular arithmetic and RSA cryptography	☐	☐	☐	☐
Linear systems, matrices, eigenvalues	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

28

YEAR 1 · S2 · WEEK 8/20 · ≈ 10.3 H

Introduction to Graph Theory

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Graph Theory · continued · ≈ 10.3 h
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Descriptive and inferential statistics in Python	☐	☐	☐	☐
Proofs: induction, contradiction, invariants	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

29

YEAR 1 · S2 · WEEK 9/20 · ≈ 10.3 H

Introduction to Graph Theory

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Graph Theory · finish · ≈ 3.2 h
- ☐ Number Theory and Cryptography · start · ≈ 7.1 h
- ☐ Reading: OpenIntro Statistics

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐
Modular arithmetic and RSA cryptography	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

30

YEAR 1 · S2 · WEEK 10/20 · ≈ 10.3 H

Number Theory and Cryptography

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Number Theory and Cryptography · finish · ≈ 9.9 h
- ☐ Delivery Problem · start · ≈ 0.5 h
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Linear systems, matrices, eigenvalues	☐	☐	☐	☐
Descriptive and inferential statistics in Python	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

31

YEAR 1 · S2 · WEEK 11/20 · ≈ 10.3 H

Delivery Problem

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Delivery Problem · continued · ≈ 10.3 h
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Proofs: induction, contradiction, invariants	☐	☐	☐	☐
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

32

YEAR 1 · S2 · WEEK 12/20 · ≈ 10.3 H

Delivery Problem

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Delivery Problem · finish · ≈ 2.2 h
- ☐ Linear Algebra: Linear Systems and Matrix Equations · start · ≈ 8.2 h
- ☐ Reading: OpenIntro Statistics

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Modular arithmetic and RSA cryptography	☐	☐	☐	☐
Linear systems, matrices, eigenvalues	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

33

YEAR 1 · S2 · WEEK 13/20 · ≈ 10.3 H

Linear Algebra: Linear Systems and Matrix Equations

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Linear Algebra: Linear Systems and Matrix Equations · finish · ≈ 1.8 h
- ☐ Linear Algebra: Matrix Algebra, Determinants, & Eigenvectors · start · ≈ 8.5 h
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Descriptive and inferential statistics in Python	☐	☐	☐	☐
Proofs: induction, contradiction, invariants	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

34

YEAR 1 · S2 · WEEK 14/20 · ≈ 10.3 H

Linear Algebra: Matrix Algebra, Determinants, & Eigenvectors

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Linear Algebra: Matrix Algebra, Determinants, & Eigenvectors · finish · ≈ 6.5 h
- ☐ Linear Algebra: Orthogonality and Diagonalization · start · ≈ 3.9 h
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐
Modular arithmetic and RSA cryptography	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

35

YEAR 1 · S2 · WEEK 15/20 · ≈ 10.3 H

Linear Algebra: Orthogonality and Diagonalization

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Linear Algebra: Orthogonality and Diagonalization · finish · ≈ 5.1 h
- ☐ Understanding and Visualizing Data with Python · start · ≈ 5.2 h
- ☐ Reading: OpenIntro Statistics

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Linear systems, matrices, eigenvalues	☐	☐	☐	☐
Descriptive and inferential statistics in Python	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

36 Understanding and Visualizing Data with Python

YEAR 1 · S2 · WEEK 16/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Understanding and Visualizing Data with Python · continued · ≈ 10.3 h
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Proofs: induction, contradiction, invariants	☐	☐	☐	☐
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

37 Understanding and Visualizing Data with Python

YEAR 1 · S2 · WEEK 17/20 · ≈ 10.3 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Understanding and Visualizing Data with Python · finish · ≈ 4.4 h
- ☐ Inferential Statistical Analysis with Python · start · ≈ 5.9 h
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Modular arithmetic and RSA cryptography	☐	☐	☐	☐
Linear systems, matrices, eigenvalues	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

38

YEAR 1 · S2 · WEEK 18/20 · ≈ 10.3 H

Inferential Statistical Analysis with Python

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Inferential Statistical Analysis with Python · continued · ≈ 10.3 h
- ☐ Reading: OpenIntro Statistics

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Descriptive and inferential statistics in Python	☐	☐	☐	☐
Proofs: induction, contradiction, invariants	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

39

YEAR 1 · S2 · WEEK 19/20 · ≈ 10.3 H

Inferential Statistical Analysis with Python

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Inferential Statistical Analysis with Python · finish · ≈ 5.7 h
- ☐ Fitting Statistical Models to Data with Python · start · ≈ 4.7 h
- ☐ **Semester project**: UCSD's Delivery Problem project (travelling salesman), then a small RSA implementation with tests.
- ☐ Reading: Mathematics for Computer Science

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Combinatorics, discrete probability, graph theory	☐	☐	☐	☐
Modular arithmetic and RSA cryptography	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

40

YEAR 1 · S2 · WEEK 20/20 · ≈ 10.3 H

Fitting Statistical Models to Data with Python

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Fitting Statistical Models to Data with Python · finish · ≈ 10.3 h
- ☐ **Semester project**: UCSD's Delivery Problem project (travelling salesman), then a small RSA implementation with tests.
- ☐ Reading: Linear Algebra

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Linear systems, matrices, eigenvalues	☐	☐	☐	☐
Descriptive and inferential statistics in Python	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.3 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

S3

YEAR 2 · PROGRAMMING AND ALGORITHMS · 168 H · ≈ 8.4 H PER WEEK

C and Java

From ___ / ___ to ___ / ___

> Understand memory, pointers and compilation with C, then object-oriented programming with Java.

SEMESTER PROGRAMME

Course	Length	Weeks	Done
Programming Fundamentals Introductory C Programming Specialization	19 h	W. 1–3	☐
Writing, Running, and Fixing Code in C Introductory C Programming Specialization	20 h	W. 3–5	☐
Pointers, Arrays, and Recursion Introductory C Programming Specialization	21 h	W. 5–8	☐
Interacting with the System and Managing Memory Introductory C Programming Specialization	24 h	W. 8–10	☐
Programming Foundations with JavaScript, HTML and CSS Java Programming and Software Engineering Fundamentals	33 h	W. 11–14	☐
Java Programming: Solving Problems with Software Java Programming and Software Engineering Fundamentals	18 h	W. 14–17	☐
Java Programming: Arrays, Lists, and Structured Data Java Programming and Software Engineering Fundamentals	15 h	W. 17–18	☐
Java Programming: Principles of Software Design Java Programming and Software Engineering Fundamentals	13 h	W. 18–20	☐
Java Programming: Build a Recommendation System Java Programming and Software Engineering Fundamentals	5 h	W. 20	☐

TARGET SKILLS

- ☐ Seven-step algorithm design, writing, testing and debugging in C
- ☐ Pointers, arrays, recursion and memory management
- ☐ Interacting with the system: files, arguments, dynamic memory
- ☐ Java, classes, lists and design principles
- ☐ Simple web pages in HTML, CSS and JavaScript

SEMESTER PROJECT

The recommender system from Duke's final course, then a mini Unix shell in C with redirections and pipes.

Signed off on ___ / ___ / _____

READING

- ☐ Modern C
- ☐ Introduction to Programming Using Java

MY GOAL FOR THIS SEMESTER

41

YEAR 2 · S3 · WEEK 1/20 · ≈ 8.4 H

Programming Fundamentals

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Fundamentals · start · ≈ 8.4 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐
Pointers, arrays, recursion and memory management	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

42

YEAR 2 · S3 · WEEK 2/20 · ≈ 8.4 H

Programming Fundamentals

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Fundamentals · continued · ≈ 8.4 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐
Java, classes, lists and design principles	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

43

YEAR 2 · S3 · WEEK 3/20 · ≈ 8.4 H

Programming Fundamentals

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Fundamentals · finish · ≈ 2.2 h
- ☐ Writing, Running, and Fixing Code in C · start · ≈ 6.2 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

44

YEAR 2 · S3 · WEEK 4/20 · ≈ 8.4 H

Writing, Running, and Fixing Code in C

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Writing, Running, and Fixing Code in C · continued · ≈ 8.4 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Pointers, arrays, recursion and memory management	☐	☐	☐	☐
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

45

YEAR 2 · S3 · WEEK 5/20 · ≈ 8.4 H

Writing, Running, and Fixing Code in C

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Writing, Running, and Fixing Code in C · finish · ≈ 5.4 h
- ☐ Pointers, Arrays, and Recursion · start · ≈ 3 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Java, classes, lists and design principles	☐	☐	☐	☐
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

46

YEAR 2 · S3 · WEEK 6/20 · ≈ 8.4 H

Pointers, Arrays, and Recursion

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Pointers, Arrays, and Recursion · continued · ≈ 8.4 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐
Pointers, arrays, recursion and memory management	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

47

YEAR 2 · S3 · WEEK 7/20 · ≈ 8.4 H

Pointers, Arrays, and Recursion

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Pointers, Arrays, and Recursion · continued · ≈ 8.4 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐
Java, classes, lists and design principles	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

48

YEAR 2 · S3 · WEEK 8/20 · ≈ 8.4 H

Pointers, Arrays, and Recursion

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Pointers, Arrays, and Recursion · finish · ≈ 1.2 h
- ☐ Interacting with the System and Managing Memory · start · ≈ 7.2 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

49

YEAR 2 · S3 · WEEK 9/20 · ≈ 8.4 H

Interacting with the System and Managing Memory

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Interacting with the System and Managing Memory · continued · ≈ 8.4 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Pointers, arrays, recursion and memory management	☐	☐	☐	☐
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

50

YEAR 2 · S3 · WEEK 10/20 · ≈ 8.4 H

Interacting with the System and Managing Memory

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Interacting with the System and Managing Memory · finish · ≈ 8.4 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Java, classes, lists and design principles	☐	☐	☐	☐
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

51

YEAR 2 · S3 · WEEK 11/20 · ≈ 8.4 H

Programming Foundations with JavaScript, HTML and CSS

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Foundations with JavaScript, HTML and CSS · continued · ≈ 8.4 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐
Pointers, arrays, recursion and memory management	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

52

YEAR 2 · S3 · WEEK 12/20 · ≈ 8.4 H

Programming Foundations with JavaScript, HTML and CSS

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Foundations with JavaScript, HTML and CSS · continued · ≈ 8.4 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐
Java, classes, lists and design principles	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

53

YEAR 2 · S3 · WEEK 13/20 · ≈ 8.4 H

Programming Foundations with JavaScript, HTML and CSS

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Foundations with JavaScript, HTML and CSS · continued · ≈ 8.4 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

54

YEAR 2 · S3 · WEEK 14/20 · ≈ 8.4 H

Programming Foundations with JavaScript, HTML and CSS

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Programming Foundations with JavaScript, HTML and CSS · finish · ≈ 7.8 h
- ☐ Java Programming: Solving Problems with Software · start · ≈ 0.6 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Pointers, arrays, recursion and memory management	☐	☐	☐	☐
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

55

YEAR 2 · S3 · WEEK 15/20 · ≈ 8.4 H

Java Programming: Solving Problems with Software

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Java Programming: Solving Problems with Software · continued · ≈ 8.4 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Java, classes, lists and design principles	☐	☐	☐	☐
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

56

YEAR 2 · S3 · WEEK 16/20 · ≈ 8.4 H

Java Programming: Solving Problems with Software

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Java Programming: Solving Problems with Software · continued · ≈ 8.4 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐
Pointers, arrays, recursion and memory management	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

57

YEAR 2 · S3 · WEEK 17/20 · ≈ 8.4 H

Java Programming: Solving Problems with Software

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Java Programming: Solving Problems with Software · finish · ≈ 0.6 h
- ☐ Java Programming: Arrays, Lists, and Structured Data · start · ≈ 7.8 h
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐
Java, classes, lists and design principles	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

58

YEAR 2 · S3 · WEEK 18/20 · ≈ 8.4 H

Java Programming: Arrays, Lists, and Structured Data

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Java Programming: Arrays, Lists, and Structured Data · finish · ≈ 7.2 h
- ☐ Java Programming: Principles of Software Design · start · ≈ 1.2 h
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐
Seven-step algorithm design, writing, testing and debugging in C	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

59

YEAR 2 · S3 · WEEK 19/20 · ≈ 8.4 H

Java Programming: Principles of Software Design

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Java Programming: Principles of Software Design · continued · ≈ 8.4 h
- ☐ **Semester project**: The recommender system from Duke's final course, then a mini Unix shell in C with redirections and pipes.
- ☐ Reading: Modern C

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Pointers, arrays, recursion and memory management	☐	☐	☐	☐
Interacting with the system: files, arguments, dynamic memory	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

60

YEAR 2 · S3 · WEEK 20/20 · ≈ 8.4 H

Java Programming: Principles of Software Design

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Java Programming: Principles of Software Design · finish · ≈ 3.4 h
- ☐ Java Programming: Build a Recommendation System · ≈ 5 h
- ☐ **Semester project**: The recommender system from Duke's final course, then a mini Unix shell in C with redirections and pipes.
- ☐ Reading: Introduction to Programming Using Java

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Java, classes, lists and design principles	☐	☐	☐	☐
Simple web pages in HTML, CSS and JavaScript	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 8.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

S4

YEAR 2 · PROGRAMMING AND ALGORITHMS · 211 H · ≈ 10.6 H PER WEEK

Data structures and algorithms

From ___ / ___ to ___ / ___

Choose and implement the right data structures, then design and analyse efficient algorithms.

SEMESTER PROGRAMME

Course	Length	Weeks	Done
Object Oriented Programming in Java Object Oriented Java Programming: Data Structures and Beyond	40 h	W. 1–4	☐
Data Structures and Performance Object Oriented Java Programming: Data Structures and Beyond	42 h	W. 4–8	☐
Advanced Data Structures in Java Object Oriented Java Programming: Data Structures and Beyond	30 h	W. 8–11	☐
Mastering the Software Engineering Interview Object Oriented Java Programming: Data Structures and Beyond	22 h	W. 11–13	☐
Capstone: Analyzing (Social) Network Data Object Oriented Java Programming: Data Structures and Beyond	20 h	W. 13–15	☐
Divide and Conquer, Sorting and Searching, and Randomized Algorithms Algorithms Specialization	15 h	W. 15–17	☐
Graph Search, Shortest Paths, and Data Structures Algorithms Specialization	14 h	W. 17–18	☐
Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming Algorithms Specialization	15 h	W. 18–19	☐
Shortest Paths Revisited, NP-Complete Problems and What To Do About Them Algorithms Specialization	13 h	W. 19–20	☐

TARGET SKILLS

- ☐ Advanced object-oriented programming in Java
- ☐ Lists, trees, hash tables, graphs and their performance
- ☐ Divide and conquer, sorting, search and randomised algorithms
- ☐ Graph traversal, shortest paths, greedy algorithms
- ☐ Dynamic programming and NP-completeness

SEMESTER PROJECT

The UCSD capstone (social network analysis in Java), then a benchmark comparing five sorting and shortest-path algorithms.

Signed off on ___ / ___ / _____

READING

- ☐ Open Data Structures
- ☐ Algorithms

MY GOAL FOR THIS SEMESTER

61

YEAR 2 · S4 · WEEK 1/20 · ≈ 10.6 H

Object Oriented Programming in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Object Oriented Programming in Java · start · ≈ 10.6 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Advanced object-oriented programming in Java	☐	☐	☐	☐
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

62

YEAR 2 · S4 · WEEK 2/20 · ≈ 10.6 H

Object Oriented Programming in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Object Oriented Programming in Java · continued · ≈ 10.6 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

63

YEAR 2 · S4 · WEEK 3/20 · ≈ 10.6 H

Object Oriented Programming in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Object Oriented Programming in Java · continued · ≈ 10.6 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Dynamic programming and NP-completeness	☐	☐	☐	☐
Advanced object-oriented programming in Java	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

64

YEAR 2 · S4 · WEEK 4/20 · ≈ 10.6 H

Object Oriented Programming in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Object Oriented Programming in Java · finish · ≈ 8.3 h
- ☐ Data Structures and Performance · start · ≈ 2.2 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

65

YEAR 2 · S4 · WEEK 5/20 · ≈ 10.6 H

Data Structures and Performance

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Data Structures and Performance · continued · ≈ 10.5 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐
Dynamic programming and NP-completeness	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

66

YEAR 2 · S4 · WEEK 6/20 · ≈ 10.6 H

Data Structures and Performance

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Data Structures and Performance · continued · ≈ 10.6 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Advanced object-oriented programming in Java	☐	☐	☐	☐
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

67

YEAR 2 · S4 · WEEK 7/20 · ≈ 10.6 H

Data Structures and Performance

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Data Structures and Performance · continued · ≈ 10.6 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

68

YEAR 2 · S4 · WEEK 8/20 · ≈ 10.6 H

Data Structures and Performance

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Data Structures and Performance · finish · ≈ 8.1 h
- ☐ Advanced Data Structures in Java · start · ≈ 2.4 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Dynamic programming and NP-completeness	☐	☐	☐	☐
Advanced object-oriented programming in Java	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

69

YEAR 2 · S4 · WEEK 9/20 · ≈ 10.6 H

Advanced Data Structures in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Advanced Data Structures in Java · continued · ≈ 10.5 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

70

YEAR 2 · S4 · WEEK 10/20 · ≈ 10.6 H

Advanced Data Structures in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Advanced Data Structures in Java · continued · ≈ 10.5 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐
Dynamic programming and NP-completeness	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

71

YEAR 2 · S4 · WEEK 11/20 · ≈ 10.6 H

Advanced Data Structures in Java

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Advanced Data Structures in Java · finish · ≈ 6.5 h
- ☐ Mastering the Software Engineering Interview · start · ≈ 4.1 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Advanced object-oriented programming in Java	☐	☐	☐	☐
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

72

YEAR 2 · S4 · WEEK 12/20 · ≈ 10.6 H

Mastering the Software Engineering Interview

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mastering the Software Engineering Interview · continued · ≈ 10.5 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

73 Mastering the Software Engineering Interview

YEAR 2 · S4 · WEEK 13/20 · ≈ 10.6 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Mastering the Software Engineering Interview · finish · ≈ 7.4 h
- ☐ Capstone: Analyzing (Social) Network Data · start · ≈ 3.2 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Dynamic programming and NP-completeness	☐	☐	☐	☐
Advanced object-oriented programming in Java	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

74

YEAR 2 · S4 · WEEK 14/20 · ≈ 10.6 H

Capstone: Analyzing (Social) Network Data

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Capstone: Analyzing (Social) Network Data · continued · ≈ 10.6 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

75

YEAR 2 · S4 · WEEK 15/20 · ≈ 10.6 H

Capstone: Analyzing (Social) Network Data

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Capstone: Analyzing (Social) Network Data · finish · ≈ 6.3 h
- ☐ Divide and Conquer, Sorting and Searching, and Randomized Algorithms · start · ≈ 4.2 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐
Dynamic programming and NP-completeness	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

76

YEAR 2 · S4 · WEEK 16/20 · ≈ 10.6 H

Divide and Conquer, Sorting and Searching, and Randomized Algorithms

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Divide and Conquer, Sorting and Searching, and Randomized Algorithms · continued · ≈ 10.6 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Advanced object-oriented programming in Java	☐	☐	☐	☐
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

77

YEAR 2 · S4 · WEEK 17/20 · ≈ 10.6 H

Divide and Conquer, Sorting and Searching, and Randomized Algorithms

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Divide and Conquer, Sorting and Searching, and Randomized Algorithms · finish · ≈ 0.2 h
- ☐ Graph Search, Shortest Paths, and Data Structures · start · ≈ 10.4 h
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

78

YEAR 2 · S4 · WEEK 18/20 · ≈ 10.6 H

Graph Search, Shortest Paths, and Data Structures

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Graph Search, Shortest Paths, and Data Structures · finish · ≈ 3.6 h
- ☐ Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming · start · ≈ 6.9 h
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Dynamic programming and NP-completeness	☐	☐	☐	☐
Advanced object-oriented programming in Java	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

79

YEAR 2 · S4 · WEEK 19/20 · ≈ 10.6 H

Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Greedy Algorithms, Minimum Spanning Trees, and Dynamic Programming · finish · ≈ 8.1 h
- ☐ Shortest Paths Revisited, NP-Complete Problems and What To Do About Them · start · ≈ 2.5 h
- ☐ **Semester project**: The UCSD capstone (social network analysis in Java), then a benchmark comparing five sorting and shortest-path algorithms.
- ☐ Reading: Open Data Structures

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Lists, trees, hash tables, graphs and their performance	☐	☐	☐	☐
Divide and conquer, sorting, search and randomised algorithms	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

80

YEAR 2 · S4 · WEEK 20/20 · ≈ 10.6 H

Shortest Paths Revisited, NP-Complete Problems and What To Do About Them

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Shortest Paths Revisited, NP-Complete Problems and What To Do About Them · finish · ≈ 10.5 h
- ☐ **Semester project**: The UCSD capstone (social network analysis in Java), then a benchmark comparing five sorting and shortest-path algorithms.
- ☐ Reading: Algorithms

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Graph traversal, shortest paths, greedy algorithms	☐	☐	☐	☐
Dynamic programming and NP-completeness	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.6 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

S5

YEAR 3 · SOFTWARE ENGINEERING AND BROADENING · 210 H · ≈ 10.5 H PER WEEK

Software engineering

From ___ / ___ to ___ / ___

> Move from a program that works to maintainable software: design, architecture, agile lifecycle and automated testing.

SEMESTER PROGRAMME

Course	Length	Weeks	Done
Object-Oriented Design Software Design and Architecture Specialization	17 h	W. 1–2	☐
Design Patterns Software Design and Architecture Specialization	15 h	W. 2–4	☐
Software Architecture Software Design and Architecture Specialization	10 h	W. 4	☐
Service-Oriented Architecture Software Design and Architecture Specialization	10 h	W. 5	☐
Software Development Processes and Methodologies Software Development Lifecycle Specialization	21 h	W. 5–7	☐
Agile Software Development Software Development Lifecycle Specialization	13 h	W. 7–9	☐
Lean Software Development Software Development Lifecycle Specialization	11 h	W. 9–10	☐
Engineering Practices for Building Quality Software Software Development Lifecycle Specialization	18 h	W. 10–11	☐
Introduction to Software Testing Software Testing and Automation Specialization	30 h	W. 11–14	☐
Black-box and White-box Testing Software Testing and Automation Specialization	26 h	W. 14–17	☐
Introduction to Automated Analysis Software Testing and Automation Specialization	19 h	W. 17–19	☐
Web and Mobile Testing with Selenium Software Testing and Automation Specialization	20 h	W. 19–20	☐

TARGET SKILLS

- ☐ Object-oriented design and design patterns
- ☐ Software architecture and service-oriented architectures
- ☐ Software processes, agile and lean
- ☐ Black-box and white-box testing, automated analysis
- ☐ Web and mobile testing

SEMESTER PROJECT

A software project run in pairs over two sprints: design with patterns, product backlog, automated tests and continuous integration.

Signed off on ___ / ___ / _____

READING

- ☐ Software Engineering at Google
- ☐ The Scrum Guide

MY GOAL FOR THIS SEMESTER

81

YEAR 3 · S5 · WEEK 1/20 · ≈ 10.5 H

Object-Oriented Design

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Object-Oriented Design · start · ≈ 10.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Object-oriented design and design patterns	☐	☐	☐	☐
Software architecture and service-oriented architectures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

82

YEAR 3 · S5 · WEEK 2/20 · ≈ 10.5 H

Object-Oriented Design

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Object-Oriented Design · finish · ≈ 6.5 h
- ☐ Design Patterns · start · ≈ 4 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software processes, agile and lean	☐	☐	☐	☐
Black-box and white-box testing, automated analysis	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

83

YEAR 3 · S5 · WEEK 3/20 · ≈ 10.5 H

Design Patterns

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Design Patterns · continued · ≈ 10.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Web and mobile testing	☐	☐	☐	☐
Object-oriented design and design patterns	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

84

YEAR 3 · S5 · WEEK 4/20 · ≈ 10.5 H

Design Patterns

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Design Patterns · finish · ≈ 0.5 h
- ☐ Software Architecture · ≈ 10 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software architecture and service-oriented architectures	☐	☐	☐	☐
Software processes, agile and lean	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

85

YEAR 3 · S5 · WEEK 5/20 · ≈ 10.5 H

Service-Oriented Architecture

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Service-Oriented Architecture · ≈ 10 h
- ☐ Software Development Processes and Methodologies · start · ≈ 0.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Black-box and white-box testing, automated analysis	☐	☐	☐	☐
Web and mobile testing	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

86 Software Development Processes and Methodologies

YEAR 3 · S5 · WEEK 6/20 · ≈ 10.5 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Development Processes and Methodologies · continued · ≈ 10.5 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Object-oriented design and design patterns	☐	☐	☐	☐
Software architecture and service-oriented architectures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

87 Software Development Processes and Methodologies

YEAR 3 · S5 · WEEK 7/20 · ≈ 10.5 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Development Processes and Methodologies · finish · ≈ 10 h
- ☐ Agile Software Development · start · ≈ 0.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software processes, agile and lean	☐	☐	☐	☐
Black-box and white-box testing, automated analysis	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

88

YEAR 3 · S5 · WEEK 8/20 · ≈ 10.5 H

Agile Software Development

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Agile Software Development · continued · ≈ 10.5 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Web and mobile testing	☐	☐	☐	☐
Object-oriented design and design patterns	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

89

YEAR 3 · S5 · WEEK 9/20 · ≈ 10.5 H

Agile Software Development

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Agile Software Development · finish · ≈ 2 h
- ☐ Lean Software Development · start · ≈ 8.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software architecture and service-oriented architectures	☐	☐	☐	☐
Software processes, agile and lean	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

90

YEAR 3 · S5 · WEEK 10/20 · ≈ 10.5 H

Lean Software Development

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Lean Software Development · finish · ≈ 2.5 h
- ☐ Engineering Practices for Building Quality Software · start · ≈ 8 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Black-box and white-box testing, automated analysis	☐	☐	☐	☐
Web and mobile testing	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

91 Engineering Practices for Building Quality Software

YEAR 3 · S5 · WEEK 11/20 · ≈ 10.5 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Engineering Practices for Building Quality Software · finish · ≈ 10 h
- ☐ Introduction to Software Testing · start · ≈ 0.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Object-oriented design and design patterns	☐	☐	☐	☐
Software architecture and service-oriented architectures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

92

YEAR 3 · S5 · WEEK 12/20 · ≈ 10.5 H

Introduction to Software Testing

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Software Testing · continued · ≈ 10.5 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software processes, agile and lean	☐	☐	☐	☐
Black-box and white-box testing, automated analysis	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

93

YEAR 3 · S5 · WEEK 13/20 · ≈ 10.5 H

Introduction to Software Testing

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Software Testing · continued · ≈ 10.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Web and mobile testing	☐	☐	☐	☐
Object-oriented design and design patterns	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

94

YEAR 3 · S5 · WEEK 14/20 · ≈ 10.5 H

Introduction to Software Testing

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Software Testing · finish · ≈ 8.5 h
- ☐ Black-box and White-box Testing · start · ≈ 2 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software architecture and service-oriented architectures	☐	☐	☐	☐
Software processes, agile and lean	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

95

YEAR 3 · S5 · WEEK 15/20 · ≈ 10.5 H

Black-box and White-box Testing

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Black-box and White-box Testing · continued · ≈ 10.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Black-box and white-box testing, automated analysis	☐	☐	☐	☐
Web and mobile testing	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

96

YEAR 3 · S5 · WEEK 16/20 · ≈ 10.5 H

Black-box and White-box Testing

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Black-box and White-box Testing · continued · ≈ 10.5 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Object-oriented design and design patterns	☐	☐	☐	☐
Software architecture and service-oriented architectures	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

97

YEAR 3 · S5 · WEEK 17/20 · ≈ 10.5 H

Black-box and White-box Testing

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Black-box and White-box Testing · finish · ≈ 3 h
- ☐ Introduction to Automated Analysis · start · ≈ 7.5 h
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software processes, agile and lean	☐	☐	☐	☐
Black-box and white-box testing, automated analysis	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

98

YEAR 3 · S5 · WEEK 18/20 · ≈ 10.5 H

Introduction to Automated Analysis

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Automated Analysis · continued · ≈ 10.5 h
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Web and mobile testing	☐	☐	☐	☐
Object-oriented design and design patterns	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

99

YEAR 3 · S5 · WEEK 19/20 · ≈ 10.5 H

Introduction to Automated Analysis

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Automated Analysis · finish · ≈ 1 h
- ☐ Web and Mobile Testing with Selenium · start · ≈ 9.5 h
- ☐ **Semester project**: A software project run in pairs over two sprints: design with patterns, product backlog, automated tests and continuous integration.
- ☐ Reading: Software Engineering at Google

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Software architecture and service-oriented architectures	☐	☐	☐	☐
Software processes, agile and lean	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

100

YEAR 3 · S5 · WEEK 20/20 · ≈ 10.5 H

Web and Mobile Testing with Selenium

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Web and Mobile Testing with Selenium · finish · ≈ 10.5 h
- ☐ **Semester project**: A software project run in pairs over two sprints: design with patterns, product backlog, automated tests and continuous integration.
- ☐ Reading: The Scrum Guide

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Black-box and white-box testing, automated analysis	☐	☐	☐	☐
Web and mobile testing	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 10.5 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

S6

YEAR 3 · SOFTWARE ENGINEERING AND BROADENING · 228 H · ≈ 11.4 H PER WEEK

Security, concurrency, the web and AI

From ___ / ___ to ___ / ___

> Broaden the profile: design secure software, program concurrency in Go, build for the web and use machine learning.

SEMESTER PROGRAMME

Course	Length	Weeks	Done
Software Design as an Element of the Software Development Lifecycle Secure Software Design Specialization	11 h	W. 1	☐
Software Design as an Abstraction Secure Software Design Specialization	16 h	W. 1–3	☐
Software Design Methods and Tools Secure Software Design Specialization	14 h	W. 3–4	☐
Software Design Threats and Mitigations Secure Software Design Specialization	19 h	W. 4–6	☐
Getting Started with Go Programming with Google Go	10 h	W. 6–7	☐
Functions, Methods, and Interfaces in Go Programming with Google Go	11 h	W. 7–8	☐
Concurrency in Go Programming with Google Go	13 h	W. 8–9	☐
Introduction to HTML5 Web Design for Everybody: Basics of Web Development & Coding Specialization	12 h	W. 9–10	☐
Introduction to CSS3 Web Design for Everybody: Basics of Web Development & Coding Specialization	17 h	W. 10–11	☐
Interactivity with JavaScript Web Design for Everybody: Basics of Web Development & Coding Specialization	10 h	W. 11–12	☐
Advanced Styling with Responsive Design Web Design for Everybody: Basics of Web Development & Coding Specialization	11 h	W. 12–13	☐
Web Design for Everybody Capstone Web Design for Everybody: Basics of Web Development & Coding Specialization	28 h	W. 13–16	☐
Introduction to Machine Learning: Supervised Learning Machine Learning: Theory and Hands-on Practice with Python	23 h	W. 16–18	☐
Introduction to Machine Learning: Unsupervised Learning Machine Learning: Theory and Hands-on Practice with Python	15 h	W. 18–19	☐
Introduction to Deep Learning Machine Learning: Theory and Hands-on Practice with Python	18 h	W. 19–20	☐

TARGET SKILLS

- ☐ Threats, abstraction and secure design methods
- ☐ Functions, methods and concurrency in Go
- ☐ HTML, CSS, JavaScript and responsive design
- ☐ Supervised and unsupervised learning, introduction to deep learning

SEMESTER PROJECT

The final project: a secure web application, served by a concurrent Go service, with a machine-learning recommendation feature.

Signed off on ___ / ___ / _____

READING

- ☐ A Tour of Go
- ☐ Eloquent JavaScript, 4th edition
- ☐ An Introduction to Statistical Learning (Python)

MY GOAL FOR THIS SEMESTER

101 Software Design as an Element of the Software Development Lifecycle

YEAR 3 · S6 · WEEK 1/20 · ≈ 11.4 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Design as an Element of the Software Development Lifecycle · ≈ 11 h
- ☐ Software Design as an Abstraction · start · ≈ 0.4 h
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

102

YEAR 3 · S6 · WEEK 2/20 · ≈ 11.4 H

Software Design as an Abstraction

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Design as an Abstraction · continued · ≈ 11.4 h
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

103 Software Design as an Abstraction

YEAR 3 · S6 · WEEK 3/20 · ≈ 11.4 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Design as an Abstraction · finish · ≈ 4.2 h
- ☐ Software Design Methods and Tools · start · ≈ 7.2 h
- ☐ Reading: An Introduction to Statistical Learning (Python)

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

104 Software Design Methods and Tools

YEAR 3 · S6 · WEEK 4/20 · ≈ 11.4 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Design Methods and Tools · finish · ≈ 6.8 h
- ☐ Software Design Threats and Mitigations · start · ≈ 4.6 h
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

105

YEAR 3 · S6 · WEEK 5/20 · ≈ 11.4 H

Software Design Threats and Mitigations

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Design Threats and Mitigations · continued · ≈ 11.4 h
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

106

YEAR 3 · S6 · WEEK 6/20 · ≈ 11.4 H

Software Design Threats and Mitigations

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Software Design Threats and Mitigations · finish · ≈ 3 h
- ☐ Getting Started with Go · start · ≈ 8.4 h
- ☐ Reading: An Introduction to Statistical Learning (Python)

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

107

YEAR 3 · S6 · WEEK 7/20 · ≈ 11.4 H

Getting Started with Go

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Getting Started with Go · finish · ≈ 1.6 h
- ☐ Functions, Methods, and Interfaces in Go · start · ≈ 9.8 h
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

108

YEAR 3 · S6 · WEEK 8/20 · ≈ 11.4 H

Functions, Methods, and Interfaces in Go

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Functions, Methods, and Interfaces in Go · finish · ≈ 1.2 h
- ☐ Concurrency in Go · start · ≈ 10.2 h
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

109

YEAR 3 · S6 · WEEK 9/20 · ≈ 11.4 H

Concurrency in Go

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Concurrency in Go · finish · ≈ 2.8 h
- ☐ Introduction to HTML5 · start · ≈ 8.6 h
- ☐ Reading: An Introduction to Statistical Learning (Python)

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

110

YEAR 3 · S6 · WEEK 10/20 · ≈ 11.4 H

Introduction to HTML5

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to HTML5 · finish · ≈ 3.4 h
- ☐ Introduction to CSS3 · start · ≈ 8 h
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

111

YEAR 3 · S6 · WEEK 11/20 · ≈ 11.4 H

Introduction to CSS3

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to CSS3 · finish · ≈ 9 h
- ☐ Interactivity with JavaScript · start · ≈ 2.4 h
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

112

YEAR 3 · S6 · WEEK 12/20 · ≈ 11.4 H

Interactivity with JavaScript

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Interactivity with JavaScript · finish · ≈ 7.6 h
- ☐ Advanced Styling with Responsive Design · start · ≈ 3.8 h
- ☐ Reading: An Introduction to Statistical Learning (Python)

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

113

YEAR 3 · S6 · WEEK 13/20 · ≈ 11.4 H

Advanced Styling with Responsive Design

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Advanced Styling with Responsive Design · finish · ≈ 7.2 h
- ☐ Web Design for Everybody Capstone · start · ≈ 4.2 h
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

114

YEAR 3 · S6 · WEEK 14/20 · ≈ 11.4 H

Web Design for Everybody Capstone

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Web Design for Everybody Capstone · continued · ≈ 11.4 h
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

115

YEAR 3 · S6 · WEEK 15/20 · ≈ 11.4 H

Web Design for Everybody Capstone

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Web Design for Everybody Capstone · continued · ≈ 11.4 h
- ☐ Reading: An Introduction to Statistical Learning (Python)

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

116

YEAR 3 · S6 · WEEK 16/20 · ≈ 11.4 H

Web Design for Everybody Capstone

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Web Design for Everybody Capstone · finish · ≈ 1 h
- ☐ Introduction to Machine Learning: Supervised Learning · start · ≈ 10.4 h
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

117 Introduction to Machine Learning: Supervised Learning

YEAR 3 · S6 · WEEK 17/20 · ≈ 11.4 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Machine Learning: Supervised Learning · continued · ≈ 11.4 h
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

118 Introduction to Machine Learning: Supervised Learning

YEAR 3 · S6 · WEEK 18/20 · ≈ 11.4 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Machine Learning: Supervised Learning · finish · ≈ 1.2 h
- ☐ Introduction to Machine Learning: Unsupervised Learning · start · ≈ 10.2 h
- ☐ Reading: An Introduction to Statistical Learning (Python)

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

119 Introduction to Machine Learning: Unsupervised Learning

YEAR 3 · S6 · WEEK 19/20 · ≈ 11.4 H

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Machine Learning: Unsupervised Learning · finish · ≈ 4.8 h
- ☐ Introduction to Deep Learning · start · ≈ 6.6 h
- ☐ **Semester project**: The final project: a secure web application, served by a concurrent Go service, with a machine-learning recommendation feature.
- ☐ Reading: A Tour of Go

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
Threats, abstraction and secure design methods	☐	☐	☐	☐
Functions, methods and concurrency in Go	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____

120

YEAR 3 · S6 · WEEK 20/20 · ≈ 11.4 H

Introduction to Deep Learning

From ___ / ___ to ___ / ___

Status: ☐ To do ☐ Doing ☐ Done

THIS WEEK

- ☐ Introduction to Deep Learning · finish · ≈ 11.4 h
- ☐ **Semester project**: The final project: a secure web application, served by a concurrent Go service, with a machine-learning recommendation feature.
- ☐ Reading: Eloquent JavaScript, 4th edition

PERSONAL GOAL

EXPLAIN TO YOUR PARTNER

Idea explained in 5 min without notes:

Clear? ☐ Yes ☐ Partly ☐ Review

I CAN DO IT

	Not yet	With help	Alone	I can explain it
HTML, CSS, JavaScript and responsive design	☐	☐	☐	☐
Supervised and unsupervised learning, introduction to deep learning	☐	☐	☐	☐

TIME SPENT

	Mon	Tue	Wed	Thu	Fri	Sat	Sun	Total
Plan								≈ 11.4 h
Actual								

WHAT I LEARNED

WHAT BLOCKED ME

QUESTIONS TO ASK

Energy: 1 ☐ 2 ☐ 3 ☐ 4 ☐ 5 ☐

Adjustment for next week: _____