University Computer Science

Scheme of Work ·

A starting allocation over 30 teaching weeks, weighted by each topic's number of subtopics — adjust to your own calendar. The last column lists the Library material that already covers the topic.

, ;

Weeks	Topic	Subtopics	Library material
1–3	**1. Programming Fundamentals**	1.1, 1.2, 1.3, 1.4, 1.5, 1.6, 1.7	Handout · 7 Learn lessons · Slide deck · Vocabulary list · 7 exercise sheets
4–5	**2. Discrete Mathematics**	2.1, 2.2, 2.3, 2.4, 2.5, 2.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
6–7	**3. Computer Systems Fundamentals**	3.1, 3.2, 3.3, 3.4, 3.5, 3.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
8–9	**4. Object-Oriented Programming**	4.1, 4.2, 4.3, 4.4, 4.5, 4.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
10–12	**5. Data Structures and Algorithms**	5.1, 5.2, 5.3, 5.4, 5.5, 5.6, 5.7	Handout · 7 Learn lessons · Slide deck · Vocabulary list · 7 exercise sheets
13–14	**6. Computer Architecture**	6.1, 6.2, 6.3, 6.4, 6.5, 6.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
15–16	**7. Operating Systems**	7.1, 7.2, 7.3, 7.4, 7.5, 7.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
17–18	**8. Databases**	8.1, 8.2, 8.3, 8.4, 8.5, 8.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
19–21	**9. Computer Networks**	9.1, 9.2, 9.3, 9.4, 9.5, 9.6, 9.7	Handout · 7 Learn lessons · Slide deck · Vocabulary list · 7 exercise sheets
22–23	**10. Algorithm Design and Analysis**	10.1, 10.2, 10.3, 10.4, 10.5, 10.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
24–25	**11. Theory of Computation and Compilers** ⟦number⟧	11.1, 11.2, 11.3, 11.4, 11.5, 11.6	Handout · 6 Learn lessons · Slide deck · Vocabulary list · 6 exercise sheets
26–28	**12. Software Engineering**	12.1, 12.2, 12.3, 12.4, 12.5, 12.6, 12.7	Handout · 7 Learn lessons · Slide deck · Vocabulary list · 7 exercise sheets
29–30	**13. Artificial Intelligence and Machine Learning**	13.1, 13.2, 13.3, 13.4, 13.5, 13.6, 13.7	Handout · 7 Learn lessons · Slide deck · Vocabulary list · 7 exercise sheets