

IFT-8002 study guide for GLO-2100 / IFT-2008

Module 1 « Introduction à l'algorithmique » is covered by the Chapter 2 of the book: « An introduction to the design and analysis of algorithms » by Anany Levitin.

Module 2 « Les structures de données de base » is covered by the chapter 3 of the book of Mark Allen Weiss « Data structures and algorithm analysis in C++ » 4th edition (preferably).

Module 3 « Graphes partie 1 » is covered by the Chapter 3 and sections 4.1 and 4.2 of « Algorithms » by Dasgupta, Papadimitriou, and Vazirani (a very nice book). See also section 9.1 of Mark Allen Weiss.

Module 4 « Graphes partie 2 » is covered by sections 4.3, 4.4, 4.6, 4.7 and 6.6 of « Algorithms ». See also sections 9.2 and 9.3 of Mark Allen Weiss

Module 5 « Les tables de dispersion » is covered by sections 5.1 to 5.6, 5.7.1, and 5.8. of Mark Allen Weiss and by section 11.3.3 and 11.5 of “Introduction to algorithms” by Cormen, Leiserson, Rivest, and Stein.

Module 6 « Les structures arborescentes et Monceaux » is covered by sections 4.1, 4.2, 4.6, 6.1, 6.2, 6.3, and 7.5 of Mark Allen Weiss

Module 7 “Arbres binaires de recherche” is covered by sections 4.3 and 4.4 of Mark Allen Weiss

Module 8 “algorithmes de tri” is covered by sections 7.1, 7.2, 7.6 of Mark Allen Weiss. The part on Radix Sort, is my own creation...

Mario Marchand,
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