### Architecting System Performance; Course Overview

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### Abstract

Course overview of the course Architecting System Performance.

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| 1. Course introduction          | 8. Emerging Behaviour           | time-oriented performance      |  |
|---------------------------------|---------------------------------|--------------------------------|--|
| 2. Managing system performance  | 9. Budgeting                    | 15. Measuring Performance      |  |
| 3. Course didactics             | 10. Modeling Paradigms          | 16. Resource Management        |  |
| 4. Connecting breadth and depth | 11. Applications and Variations | 17. Greedy and Lazy Pattern    |  |
| 5. Performance Modeling         | 12. Model Analysis              | 18.Scheduling                  |  |
| 6. Level of Abstraction         | 13. Reasoning Approach          | 19. Robust Performance         |  |
| 7. Visualizing Dynamic Behavior | 14. Defining Performance        | 20. Bloating, Waste, and Value |  |
|                                 |                                 |                                |  |

# Nuggets Architecting System Performance

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|                                 |                                 |                                |  |



## Assignments in Face-to-Face Module

| 0. elevator case   |                           |  |   |  |  |  |
|--|---------------------------|--|---|--|--|--|
| supersystem  | system                    |  |   | subsystem  |  |  |
| 1. sketch the problem<br>goal use case   | key performa<br>parameter | ince<br>'s (   | main<br>concepts                            | critical<br>technologies                             |  |  |
|  |                           | <ul> <li>2. make conceptual model of the current situation</li> <li>model dynamic behavior</li> <li>model 0-order kpp using functions (as simple as possible)</li> <li>quantify contribution to kpp using observed data</li> </ul> |   |  |  |  |
| <ul> <li>3. explore customer and business relevance</li> <li>develop story</li> <li>model workflow and performance</li> <li>model customer value as function of kpp</li> </ul> |                           |  |   |  |  |  |
|  |                           | <ul> <li>4. make consolutions</li> <li>model th</li> <li>model &amp;</li> </ul>  | nceptual mod<br>e foreseen s<br>compare 2 a | del of potential<br>olution<br>alternative solutions |  |  |
| E list quastions and uncortaintics, reformulate problem and goal, and formulate gaps and antions   |                           |  |   |  |  |  |

5. list questions and uncertainties, reformulate problem and goal, and formulate gaps and options

6. develop an elevator pitch to report you findings and recommendations to management

