

Mastering Systems Integration; Course Overview

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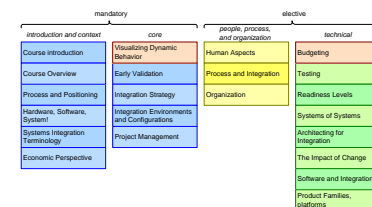
Abstract

Course overview of the course Systems Integration.

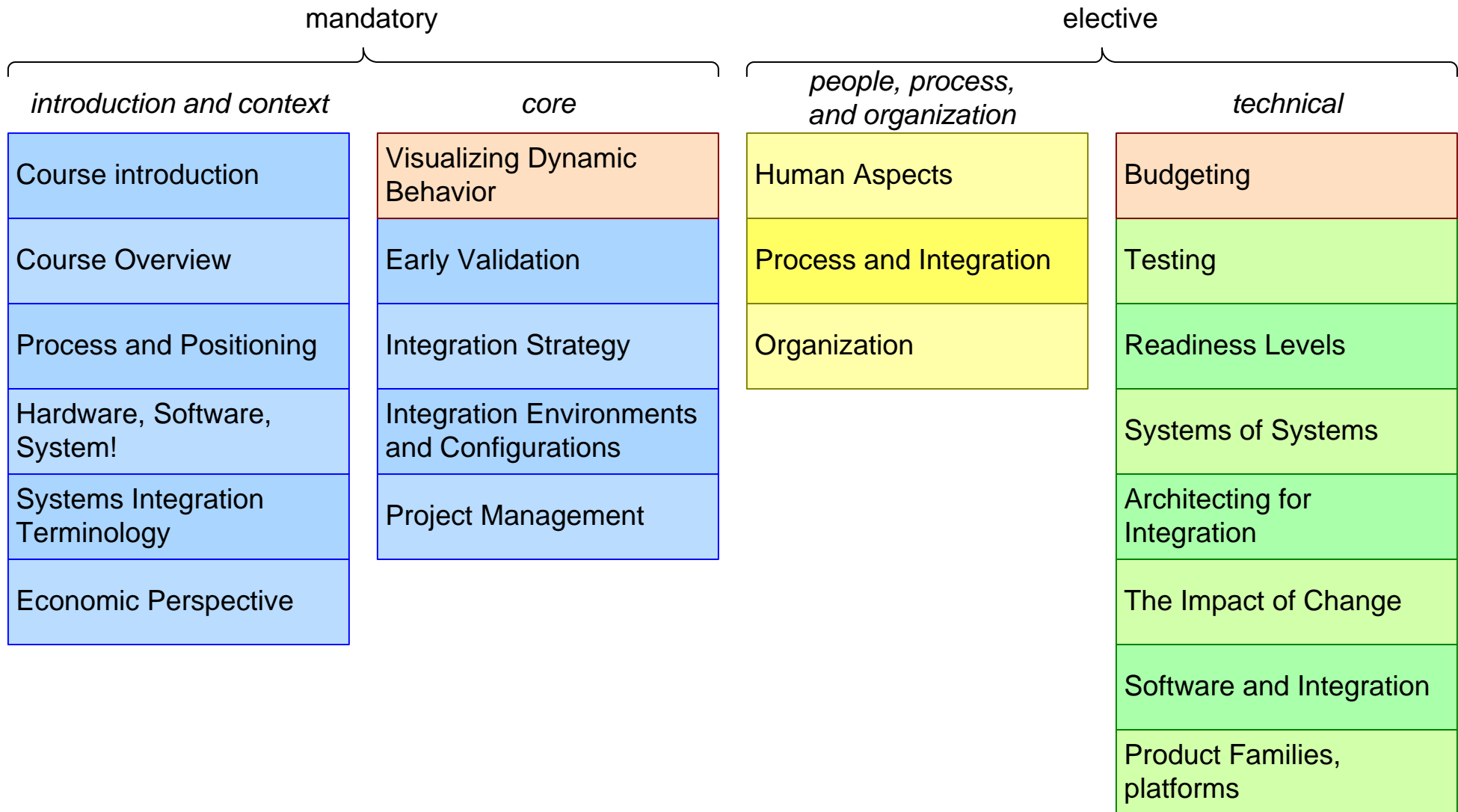
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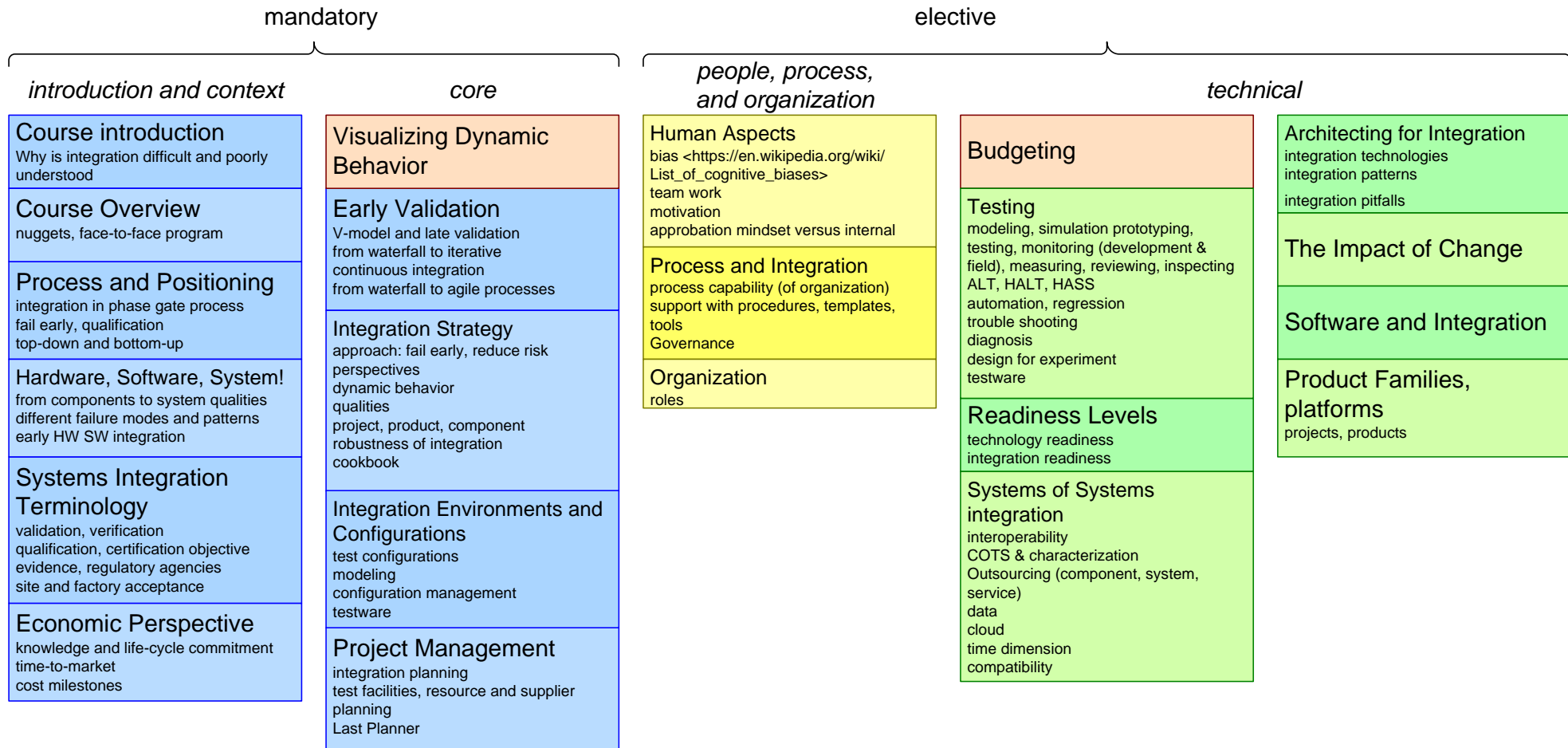
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Nuggets Course Mastering Systems Integration



Content per Nugget



Assignments in Face-to-Face Module

System Specification

- determine **KPPs** and their quantified specification
- assess **risk** of KPPs caused by volatility, uncertainty, complexity and ambiguity
pick one **high-risk** KPP to elaborate
- describe **typical use** (including circumstances in the **context**) related to KPP

System design

- make system, SW, and HW **block diagrams** (parts, interfaces, connections)
- model **dynamic behavior** resulting in the KPP
- map **dynamic behavior** on **block diagrams** and **budget**: quantify contributions to KPP
- re-assess **risks** of KPP

Reflection and Evaluation

- identify **tensions** or **gaps** in processes, organization, people, tools, instrumentation, context knowledge, etc. for executing the integration.

Systems Integration Plan

- determine an incremental **integration sequence** to measure the KPP as early as possible
- assess for the parts contributing to the KPP
 - **fitness for purpose** in customer context
 - **integration configurations** and **testware**
 - **supplier** and **logistics** status
 - **technology readiness**
 - **development** and **resource** status
- Identify **tensions** with development, logistics status, and availability of testware
and transform the sequence in a **(PERT) plan** with required resources and **integration configurations**
- assess **robustness** of the plan
- capture results in presentation