

Principles and Models for System Architecture

Schedule for participants continuing from the online
MITxPro Professional Certificate Program in Architecture and Systems Engineering

July 16-19, 2019

Instructors: Prof. Edward Crawley, Dr. Bruce Cameron, Dr. Dov Dori

	Tuesday	Wednesday	Thursday	Friday
8:30	Welcome and Introductions (Cameron)	Architectural Decisions (Cameron)	Role and Deliverables of the Architect (Crawley)	Modularity and Architecture (Cameron)
9:00				
9:30	Architecture Review : Function, Form, Diagrams (Cameron)	Exercise on Architectural Decisions (Cameron)	Exercise on Role and Deliverables of the Architect (Crawley)	DSM as a Representation, including Interfaces(Crawley)
10:00				
10:30	Team Formation (Cameron)	Strategy + Marketing Impact on Architecture (Cameron)	Case Study (Crawley)	DSM Exercise (Crawley)
11:00	Exercise: Architecture Diagrams (Cameron)			
11:30		Strategy + Marketing Influence Exercise (Cameron)		
Noon	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>	<i>Lunch</i>
1:00	Concept (Crawley)	Strategy + Marketing Influence Exercise (Cameron)	Complexity Management in OPM (Dori)	Research in Architecture (Cameron)
1:30				
2:00	Introduction to OPM (Dori)	Stakeholder Needs and Goals (Crawley)	Intermediate project presentations, feedback (Crawley and Dori)	Final project presentations and feedback (All)
2:30				
3:00	Exercise: OPM Modeling	Exercise on Stakeholders (Crawley)	DoDAF, SysML and OPM (Dori)	Course summary and awarding of certificates (All)
3:30				
4:00	Actions Plans Discussion (Cameron)	What is a model? (Dori)		
4:30			Coached session on project (Crawley and Dori)	

*There are evening readings and assignments;
refer to the program outline at <http://shortprograms.mit.edu/sea> for details*