



**2020**

Annual **INCOSE**  
international workshop

Torrance, CA, USA

January 25 - 28, 2020

# Model-based Conceptual Design

---

[www.incose.org/IW2020](http://www.incose.org/IW2020)

# Model-based Conceptual Design



**2020**  
Annual **INCOSE**  
international workshop  
Torrance, CA, USA  
January 25 - 28, 2020

## CHAIR

Randall Satterthwaite  
(SatterthwaiteRandallM@JohnDeere.com)

## MEMBERS

32

## INCOSE CONNECT ADDRESS



<https://connect.incose.org/WorkingGroups/MBCD>

## INCOSE WEB PAGE



<https://www.incose.org/incose-member-resources/working-groups/transformational/model-based-conceptual-design>

# Charter Summary



**2020**  
Annual **INCOSE**  
international workshop  
Torrance, CA, USA  
January 25 - 28, 2020

## WG PURPOSE/MISSION

Take model based design methods and principles and apply them to the concept phase of development to improve quality and efficiency of the concept phase as well as transitioning to the development phase.

## WG GOAL(S)

1. Clearly define the dependencies and deliverable of the concept design model.
2. Define framework to use with concept design model.
3. Define key characteristics of concept design model.
4. Provide scalability of framework for different industries, project complexity, and timelines.

## WG SCOPE

Operate within the concept phase accounting for any industry/application and project complexity.

# IW Outcomes



**2020**  
Annual **INCOSE**  
international workshop  
Torrance, CA, USA  
January 25 - 28, 2020

## IW Outcomes

No MBCD Workshops are scheduled for IW2020. MBCD WG members will be looking at work from other working groups to identify collaboration opportunities as existing work that can be leveraged for MBCD.

# Planned Work past IW



**2020**  
Annual **INCOSE**  
international workshop  
Torrance, CA, USA  
January 25 - 28, 2020

## PLANNED ACTIVITIES

1. Define the boundary of concept design
2. Define the tools, methods, and existing work that can be leveraged from other working groups, industry, and research
3. Apply methods and tools to example project to validate efficacy of MBCD Framework
4. Model the MBCD Framework
5. Model the CNC Demo Project with MBCD Framework

## PLANNED WORK PRODUCTS

1. Complete Model of CNC Demo Project by IW2021.
2. Build CNC Demo Project by IS2021.
3. Deliver Version 1 of MBCD Framework as IS2022.