

Meeting Name	Time Start	Time End	Meeting Listing	Room	Meeting Description	Related WG
<b>Saturday</b>						
Systems Thinking Roundtable	07:00	08:00	Open/Working session	Salon A		Systems Science;
Opening Plenary	08:00	10:00	Open	Salon DE		
Break	10:00	10:30	Open	Ballroom Foyer		
First-Time Attendee Session	10:00	10:30	Closed	Lighthouse Ballroom	New to the International Workshop? Learn how to make the most of this unique event as you enjoy coffee with seasoned INCOSE members ready to share their insights. Take advantage of this special opportunity to make new connections across the systems engineering community and have some fun as you gain insights into the workshop and how INCOSE can help advance your career.	
Systems Science WG	10:00	17:00	Open/Working session	Pier 2+4	Systems Principles Action Group Report (Rousseau/Calvo) New Definitions of SE & System (Martin/McKinney) Systems Research & Development: a) SSM-TRIZ methodology (Phillips), 2 hrs b) Systems Principles for Designing Human Activity Systems (Calvo/Rousseau), 1-2 hrs	Systems Science;
Asia Oceania Sector Directors meeting	10:30	12:00	Open	Executive Suite 1619		
Certification Advisory Group	10:30	17:00	Closed	Pier 10		
Chapter Awards Program	10:30	18:00	Closed	Pier 7		
Continuous Iterative Development and Acquisition Working Group	10:30	17:00	Open/Working session	Pier 11		
Corporate Advisory Board Meeting	10:30	17:00	Closed	Salon D		
EMEA sector chapter leaders meeting	10:30	12:00	Open	Pier 8		
Events - IS2019 Update	10:30	12:00	Closed	Pier 1		
FuSE core team	10:30	17:00	Closed	Pier 9		
Intro to Natural Systems	10:30	12:00	Open/Outreach session	Executive Suite 1634	What do we mean by natural systems? How can knowledge of this help an SE?	Natural Systems;
MBSE Initiative	10:30	18:00	Open	Salon E	10:30-11:00 Opening: Transformation Initiative and MBSE Incubator (Troy Peterson & Mark Sampson)  11:00-12:00 MBSE Keynote Speaker: Enterprise Change and Transformation (Willy Donaldson, Newport Univ.)  12:00-13:00 Lunch  13:00-13:10 Opening: Transformation Lightning Talks  13:10-13:30 MBE Manifesto (Ed Carroll, Sandia National Labs)  13:30-13:50 Patterns Storybook (Bill Schindel, ICTT System Sciences)  13:50-14:10 How Model Curation Influences Model Duration (Donna Rhodes, MIT)  14:10-14:30 Baseball as a model for teaching STEM (Ricardo Valeri, UofAriz)  14:30-15:00 Transformation Lightning Speaker Interaction/Q&A  15:00-15:30 Break  15:30-15:40 Opening: SE In Action Lightning Talks	MBSE
Membership Strategy	10:30	12:00	Closed	Executive Suite 1705	15:40-16:00 IME Tool Briefing Membership strategy meeting	Admin/Committee meeting;
Requirements WG @ IW2019	10:30	12:00	Open/Working session	Pier 5	10:30-11:00 Closed session to discuss IW Agenda 11:00-12:00 RWG kick-off, Welcome, 2018 in review	Requirements;MBSE
System Safety - C suite publication review	10:30	12:00	Open/Working session	Executive Suite 1734	To review the draft System Safety C suite document	System Safety
Systems Security Engineering WG IW19 Workshop	10:30	17:00	Open/Working session	Salon H	IW19 Systems Security Engineering WG Workshop will review projects in process, collaborations in process, consider new projects, and discuss whatever you like. See WG Connect Site IW19 folder in shared documents for agenda and GlobalMeet link. Saturday 1030-1700, Pacific Time.	Systems Security Engineering;
Technical Operations Assistant Directors meeting	10:30	12:00	Closed	Salon BC		
TIMLM WG - SETDB Opening Session	10:30	11:00	Open/Outreach session	Pier 3	Opening Session for the Systems Engineering Tools Database Project. Status for 2018, Agenda for IW2019 and plans for 2019.	Tool Integration and Model Lifecycle Management; MBSE;
Automotive WG	11:00	12:00	Open/Working session	Salon A	Welcome & Kick-off, start listing miscellaneous topics complementary to decided IW19 sessions	Automotive;
IS2019 Technical review	11:00	16:30	Closed	Pier 6	Finalization of IS2019 reviews and draft program	
SETDB System Model (SysML) Review	11:00	12:00	Open/Working session	Pier 3	Review of the SETDB SysML System Model	Tool Integration and Model Lifecycle Management;MBSE;
Lunch	12:00	13:00	Open	Lighthouse Ballroom		
Technical Operations Working Group Leadership luncheon	12:00	13:00	Closed	Salon BC	o Give information to WG chairs o Opportunity for WG chairs to express their needs o INCOSE President and President Elect will be attending	
Best Practices for planning and Executing a Web meeting	13:00	15:00	Open/Working session	Salon G		
Events core planning committee	13:00	18:00	Closed	Pier 1	Strategy Meeting	
MBCD WG Kickoff	13:00	15:00	Open/Working session	Executive Suite 1634	As the MBCD WG is being rebooted, this working session will be to share the deliverables for MBCD over the next few years and the pilot project used for MBCD development. Following the overview, the WG will start to breakdown the pilot project and work through defining the various aspects of MBCD.	Model-Based Conceptual Design;MBSE;
Membership Strategy	13:00	15:00	Open/Working session	Executive Suite 1705	Membership Committee Meeting	Admin/Committee meeting;
NSWG Communities of Practice Working Session	13:00	15:00	Open/Working session	Executive Suite 1718	Overview of natural systems and design communities of practice, creation/ curation of bio-inspired community map	Natural Systems;
Object-Oriented Systems Engineering Method (OOSEM) Working Group Orientation Session	13:00	16:00	Open/Outreach session	Pier 8	Introduce the OOSEM Working Group. Offer Introduction to OOSEM WG implementation of the new Object-Process Methodology (OPM) Specification. Give Status Report on incorporating OPM into a planned INCOSE Technical Product, "OOSEM Course Update". Solicit interest from others on participating in OOSEM WG meetings and projects.	Object-Oriented Systems Engineering Method;MBSE;
Requirements WG @ IW2019	13:00	15:00	Open/Working session	Pier 5	Overview to the RWG "Guide to Writing Requirements" and whitepaper "Integrated Data as a Foundation of SE."	Requirements;MBSE
Resilient Systems Working Group	13:00	15:00	Open/Working session	Executive Suite 1619	This will be a face-to-face tag-up for the working group members. We plan to have a few – very short – TedTalk type presentations. We will discuss the WG's current major projects of updating the SEBOK section on resilience, and the book chapter on which the WG is collaborating. We will be reaching out to other WGs in our community of interest to attend and make short presentations.	Resilient Systems;

SETDB Operational Concept Review	13:00	14:00	Open/Working session	Pier 3	Review of the SETDB Operational Concept and documentation.	Tool Integration and Model Lifecycle Management;MBSE; Transportation;
Transportation Working Group	13:00	16:00	Open/Working session	Executive Suite 1635		
EMEA WS 2019 - working sessions	13:30	15:00	Open/Working session	Salon A	Brainstorm session with EMEA chapter leaders on preparing working session subjects for the EMEA workshop 2019, Oct 10/11	EMEA chapter leaders
SEQM (Systems Eng Quality Management) WG 1	13:30	15:30	Open/Working session	Executive Suite 1735	Working session for SEQM members to review training tracks, develop working scenarios for projects and to discuss presentations for IS 2012. Introduce the topic/issue of Staff Turnover and how SE/QM can address it (Part 1 and 2)	SE Quality Management;
Human-Systems Integration Working Group	14:00	17:00	Open/Working session	Salon F	This meeting is open to a large panel of people interested in HSI. We will do a review of HSI current practice, content and perspectives. We will talk about HSI2019 conference.	Human-Systems Integration;
SETDB System Requirements Review	14:00	17:00	Open/Working session	Pier 3	SETDB Requirements, capture, analysis and validation	Tool Integration and Model Lifecycle Management;MBSE;
Volunteer Opportunities Task Team (VOTT)	14:00	16:00	Closed	Executive Suite 1734	This is a Board initiative to set up a Volunteer Opportunities Task Team.	Board Initiative
Break	15:00	15:30	Open	Ballroom Foyer		
Infrastructure Working Group Products/Strategy	15:00	17:00	Open/Working session	Executive Suite 1718	Pre Strategy Meeting Collaboration TWG, AWG, and other Working Groups	Infrastructure;
Complexity and Natural Systems	15:30	17:00	Open/Working session	Executive Suite 1619	Joint meeting with Complex Systems Working Group	Natural Systems;
Requirements WG @ IW2019	15:30	17:00	Open/Working session	Pier 5	Insights into the Requirement Development & Management in an MBSE world - presentation & discussion (MBSE Related).	Requirements;MBSE
Review of current state of ISO activities and new documents	15:30	17:00	Open/Working session	Executive Suite 1705	Review of current developments of ISO 29110 products and planning for contributions	Very Small Entities;
Automotive WG	16:00	17:00	Open/Working session	Salon G	AWG management & 2019 plans	Automotive;
BKCASE Governing Board Meeting	16:00	17:00	Open/Working session	Executive Suite 1735	The Board of Governors will review progress, plans, budget, and other considerations for 2019 and beyond.	BKCASE
Wiley Meeting	17:30	18:30	Closed	Executive Suite 1734		
INCOSE Foundation Soiree - Sponsored by the Corporate Advisory Board	19:00	21:00	Open	Lighthouse Ballroom		
<b>Sunday</b>						
INCOSE Institute for Technical Leadership	07:00	09:00	Closed	Executive Suite 1735	Strategy Meeting	
Systems Thinking Roundtable	07:00	08:00	Open/Working session	Salon A		Systems Science;
INCOSE Certification knowledge exam	07:30	11:30	Closed	Pier 9+11		
DEIXWG planning meeting	08:00	10:00	Open/Working session	Salon F	Review DEIXWG meeting plans Preparation for DEIXWG meetings planned for IW.	Digital Engineering Information Exchange WG; MBSE;
Requirements WG @ IW2019	08:00	10:00	Open/Working session	Pier 5	08:00-09:00 "Augmenting requirements with models" – presentation & discussion (MBSE Related) 09:00-10:00 "Managing the risks of requirement uncertainty" – presentation & discussion	Requirements;MBSE
Systems Science WG	08:00	17:00	Open/Working session	Salon G	Sys Sci for Sys Engr (SS4SE), 7 hrs a) Systems science integration (G Smith) b) Systems science enterprise (J Martin) c) Systemology - Principles and Laws (Rousseau/Calvo/Billingham) d) Systemic transformations (Swami) e) SE foundations (Swami/Schindel) f) Isomorphies & grand sequence (Troncale/Smith) g) System life cycle processes (Smith/Lomax)	Systems Science;
The Essential Component to Digital Transformation	08:00	08:30	Open	Salon D		Town Hall; MBSE;
Open Exchange between the Members and Presidents of INCOSE	08:30	09:00	Open	Salon D		Town Hall
Certification Advisory Group	09:00	17:00	Closed	Pier 10		
Corporate Advisory Board Workshops	09:00	12:00	Closed	Salon D		
INCOSE-PMI Alliance	09:00	10:30	Closed	Executive Suite 1718	PMI-INCOSE Alliance Meeting	Admin/Committee meeting;
Infrastructure Working Group Products/Strategy	09:00	17:00	Open/Working session	Executive Suite 1735	Discuss Products under development Strategy Session for 2019	Infrastructure;
MBSE Initiative	09:00	18:00	Open	Salon E	09:00-09:30 Opening: Transformation Initiative and MBSE Incubator (Troy Peterson & Mark Sampson)  09:30-10:00 MBSE, PLM and the Digital Thread (Don Tolle, CIMdata)  10:00-10:30 Break  10:30-10:50 MBSE Survey Results Rob Cloutier (Univ. S. Alabama)  10:50-11:30 Working Group Round Robin... (SysSftw, CntInfra, DA, MBCD, etc.)  11:30-12:00 MBSE Colloaborations, MB Activities (Bill Schindel)  12:00-13:00 Lunch  13:00-13:20 MBSE Eco-System (Russell Peak, Georgia Tech)  13:20-13:40 Augmented Intelligence for SE (Mark Petrotta, SSI)  13:40-14:00 Model Based Enterprise Capabilities Matrix (Al Hoeb, Aerospace - Joe Hale, NASA)  14:00-14:20 Production and Logisitics Modeling (Timothy Sprock, NIST)	MBSE

MoSSEc (AP243) Standard and Model Interoperability Review	09:00	10:30	Open/Working session	Salon A	The globalization of the aerospace and defence industries is driving large volumes of work to model and simulate product performance and behavior using geographically distributed teams across their supply chain. The modelling and simulation technical data is used to justify change decisions and to validate the product throughout development, certification and in-service. There are mature standards for exchange of the modelling and simulation technical data, but these either do not include traceability to the systems engineering and product data management context, or are inefficient for data sharing. This context information can be summarized as "who", "what", "where", "when", "how", "why", and the goal of the MoSSEc project is to provide the standard for sharing this information. The MoSSEc project will be agnostic of the type of modelling and simulation, and it is the intention that the modelling and simulation data will continue to be exchanged with the technical standards in use today (e.g. AP209, AP210, AP242, FMI).  This presentation will describe the rationale and context for the work, provide the status and future plans of the project (developed as part of the ISO suite of STEP standards)."	Tool Integration and Model Lifecycle Management; MBSE;
SE Handbook Input Session	09:00	10:00	Open/Outreach session	Executive Suite 1705	INCOSE is in the early stages of planning the next edition of the SE Handbook. This session provides IW participants an opportunity to provide inputs to be considered for the next edition.	Knowledge Management;
SETDB Tool Categories and Taxonomy	09:00	12:00	Closed	Pier 3	SETDB Tool Category review and development	Tool Integration and Model Lifecycle Management;
System safety - Perspectives	09:00	12:00	Open/Working session	Salon C	To use Checkland's soft systems to understand different perspectives on System Safety Engineering	System Safety
Automotive WG	10:00	12:00	Open/Working session	Salon B	AWG working meeting, content confirmed/refined during kick-off: SE@SAE / OMG Safety & Reliability Profile	Automotive;
Break	10:00	10:30	Open	Ballroom Foyer		
IS2019 Technical review	10:00	16:30	Closed	Pier 6	Finalization of IS2019 reviews and draft program	
Produce Line Engineering - working meeting	10:00	11:00	Open/Working session	Executive Suite 1705	Continue the development of the PLE supporting artifacts to enable broad industry understanding and adoption of Product Line Engineering principals to gain dramatic cost avoidance and efficiencies in product and systems development.	Product Line Engineering;
Space Systems WG	10:00	11:00	Open/Working session	Salon H	To determine the road ahead	Space Systems;
Systems Engineering Editorial Board	10:00	12:00	Closed	Executive Suite 1635	Systems Engineering Journal Editorial Board meeting.	Systems Engineering Journal
Fellows Selection Committee	10:30	12:00	Closed	Pier 8		
NASA Challenge for natural systems	10:30	12:00	Open/Outreach session	Executive Suite 1619	Review NASA challenge for nature inspired solutions, and proposed solutions.	Natural Systems;
PM-SE Integration WG meeting	10:30	12:00	Open/Working session	Salon F		PM-SE Integration;
Requirements WG @ IW2019	10:30	12:00	Open/Working session	Pier 5	Work on developing the new "Guide to Developing & Managing Requirements" - (MBSE Related)	Requirements;MBSE
Honours & Awards Committee	11:00	11:30	Closed	Pier 1		
Board of Directors Meeting	12:00	17:30	Closed	Pier 2+4		
Lunch	12:00	13:00	Open	Lighthouse Ballroom		
Chapter Awards Lean Improvement	13:00	17:00	Open/Outreach session	Pier 8		
CIPR Working Group - 2018 Recap and Plans for 2019	13:00	15:00	Open/Working session	Executive Suite 1734	CIPR working group discussion / recap of 2018 achievements and planning for 2019 goals and activities.	Critical Infrastructure Protection and Recovery;
Competency WG Strategy Session	13:00	15:00	Open/Working session	Salon B	Meeting to discuss next steps for the new Competency Framework and to lay out a strategy for work to be done at IW2019 and IS2019. The next big step is developing the Assessment Guide.	Competency;
Complex WG Meeting	13:00	17:00	Open/Working session	Executive Suite 1705		Complexity
DEIX WG - MBE Topical Encyclopedia & Standards Review	13:00	15:00	Open/Working session	Salon A	Facilitate sessions where the Authors will present their MBE topic solicit consensus on the explanations as described in the working versions of the DEIX encyclopedia. Then solicit feedback on the lists of relevant standards, then, agree to the priority and the applicability to exchanging MBE information between buyers, suppliers, and disciplines.	Digital Engineering Information Exchange WG; MBSE;
Foundation Meeting	13:00	16:00	Open	Executive Suite 1619		
MBCD WG Kickoff	13:00	15:00	Open/Working session	Executive Suite 1634	Continue work to breakdown MBCD effort on pilot project and identify future activities for the next year.	Model-Based Conceptual Design;MBSE;
MBSE 101	13:00	15:00	Open/Outreach session	Salon D	MBSE 101 for MBSE novices. Provides and introductory why, what, and how behind MBSE along with experiences on various projects.	MBSE Workshop; MBSE;
MBSE Patterns Working Group Meetings at IW2019	13:00	17:00	Open/Working session	Salon H	Meeting 1 of 2 meetings of Patterns WG at IW2019. Agenda will be posted at <a href="http://www.omgwiki.org/MBSE/doku.php?id=mbse:patterns:mbse_patterns_wg_participation_in_incose_iw2019">http://www.omgwiki.org/MBSE/doku.php?id=mbse:patterns:mbse_patterns_wg_participation_in_incose_iw2019</a>	MBSE Patterns; MBSE;
NSWG/Systemology Joint Session: NS Tools in the SE Process	13:00	15:00	Open/Working session	Executive Suite 1635	The NASA Vine Systemology Cluster has produced a list of 25 tools for bio-inspired design. Join us to discuss how these could be mapped to the SE process.	Natural Systems; MBSE;
Requirements WG @ IW2019	13:00	15:00	Open/Working session	Pier 5	Joint meeting with the TIMLM WG on the SE Tools Database (SETDB) Tool Vendor Questionnaire- (MBSE Related)	Requirements;MBSE
Risk Management WG	13:00	15:00	Open/Working session	Pier 9+11	Open working session. New members welcome. Will review WG activities. Detailed agenda will be posted on the Risk Mgmt WG webpage prior to the IW.	Risk Mgmt;
SETDB Tool Vendor Survey Development	13:00	17:00	Closed	Pier 3	Initiate Tool Vendor Survey development for tool data capture by working groups.	Tool Integration and Model Lifecycle Management;
System of Systems Working Group	13:00	17:00	Open/Working session	Pier 7	1300-1500 SOS Business Meeting to review SoSWG progress since IS18 1. Webinars (Hoehne) 2. Case Studies (Wilson, Cook (remote?)) 3. SoS value to INCOSE (Harding) 4. Update on Cooperation with Automotive (Hoehne) 5. Mission Engineering (Miller) 1500-1530 Break 1530-1700 SEBOK Update Discussion (Dahmann, lead)	Systems of Systems Engineering;
System safety - Perspectives	13:00	15:00	Open/Working session	Salon C	To use Checkland's soft systems to understand different perspectives on System Safety Engineering	System Safety
Systems Engineering Quality Management	13:00	16:00	Open/Working session	Salon F		SE Quality Management;
WSRC 2019 Committee Meeting	13:00	14:00	Open/Working session	Pier 1	Planning for the WSRC scheduled for Sept 13-15, 2019 at LMU, Los Angeles.	WSRC 2019 Committee Meeting
Process Improvement Working Group	14:30	15:30	Open/Working session	Pier 1	The purpose of the Process Improvement WG is to: 1. Identify SE Process Improvement opportunities. 2. Facilitate improvement of the SE Process thru expansion of current SE processes, activities, steps, 3. and practices. 4. Coordinate SE process improvement mechanisms throughout INCOSE. Provide improved processes, activities, steps, and practices to INCOSE members.	All WGs.
Break	15:00	15:30	Open	Ballroom Foyer		

CIPR Working Group Modeling Activities - Microgrids; Resilient Hospitals	15:00	17:00	Open/Working session	Executive Suite 1734	Discussion of CIPR working group modeling activities that includes involvement and outreach to P&E and OOSEM working groups. Plans for path forward for the current two modeling efforts, and discussion of other modeling efforts to undertake in 2019.	Critical Infrastructure Protection and Recovery; Object-Oriented Systems Engineering Method; Power & Energy; MBSE;
Decision Analysis Working Group	15:00	17:00	Open/Working session	Salon B	State of the Practice Guest Presentation Review of project activities Annual Work Planning	Decision Analysis;
Product Line Engineering Working Group – Work Products	15:00	17:00	Open/Working session	Pier 9+11	Working session to assess the progress and support the development of PLE working products.	Product Line Engineering;
System and Software Interface WG	15:00	16:00	Open/Outreach session	Executive Suite 1635	Introduce the working group and its projects and ask for workers willing to work in tomorrow's "closed" session.	Systems and Software Interface;
Telecommunications WG	15:00	17:00	Open/Outreach session	Executive Suite 1718	INCOSE's Australian Chapter (the Systems Engineering Society of Australia) has been running a Telecommunications Working Group for over a year. We are bringing this work to the INCOSE IW to look for input on the problems in both the telecommunications industry and also other areas that heavily rely on telecommunications services (such as government, defense, transportation), and how systems engineering practices can help. The working session will review the artifacts produced so far, and seek out problem areas for further efforts over the next 12 months.	Telecommunications
Requirements WG @ IW2019	15:30	17:00	Open/Working session	Pier 5	Joint meeting with the TIMLM WG on the SE Tools Database (SETDB) Tool Vendor Questionnaire- (MBSE Related)	Requirements; MBSE
Training Working Group	15:30	16:30	Open/Working session	Pier 1	<ul style="list-style-type: none"> <li>Determine our member's needs</li> <li>Develop or solicit training modules</li> <li>Solicit training volunteer instructors</li> <li>Provide training as a benefit to INCOSE members</li> <li>Coordinate training throughout INCOSE to expand training opportunities</li> </ul>	All Working Groups
Automotive WG	16:00	17:00	Closed	Salon A	Automotive SE Vision sub-group: Status and start executive summary work. Check final meeting attribute: access maybe limited to sub-group members.	Automotive;
SEP's Reception for ASEPs, CSEPs and ESEPs MBSE Reception	17:00 18:00	19:00 19:00	Closed MBSE Workshop Participants	Village Green The Strand		MBSE;
<b>Monday</b>						
Systems Thinking Roundtable	07:00	08:00	Open/Working session	Salon A		Systems Science;
Architecture Workng Group worksession	08:00	17:00	Open/Working session	Salon H	This meeting will update members on AWG activities, conduct input session for works in progress, and plan future efforts. (Detailed agenda to follow in late December) Topics include Smart Manufacturing Architecture work session, describing architectures using algebraic specifications, enhancement of the Workbench presented last year, architecture styles input summary, update on architecture related international standards.	Architecture; MBSE;
FuSE – The Future of Systems Engineering Infrastructure Working Group Products/Strategy	08:00 08:00	08:30 12:00	Open Open/Working session	Salon D Salon F	Detail 2019 Strategy Implementation Plan. Goals, Objectives, and KPIs. Finalize Quad Chart.	Town Hall Infrastructure;
MBX Ecosystems/OpenMBEE Workshop	08:00	17:00	Open/Working session	Salon E	This workshop Day1 Mon expands upon the model-based ecosystems sessions we held at IW15, IW17, and IW18. The main organizers are Chris Delp (NASA/JPL), Brittany Friedland (Boeing), and Russell Peak (Georgia Tech; POC). This year we include focus areas for various modeling environment stakeholder communities, including end users, deployment/ops, ecosystem SEs/architects, and ecosystem tool developers. See website for agenda specifics.	MBSE Initiative; MBSE;
Part 1 of the Workshop on the Future of the Graduate Reference Curriculum for Systems Engineering (GRCSE)	08:00	12:00	Open/Working session	Pier 8	<p>GRCSE was released in December 2012 as guidance to those responsible for master's programs in systems engineering. That guidance has not had a significant refresh since it was first released. Yet, there have been many changes in systems engineering itself as well as in the technologies embedded in the products, services, and enterprises on which systems engineers work.</p> <p>This workshop will examine whether a project to update GRCSE should be launched, what the scope of that project should be, and put together a top-level project plan. A major change in scope from the original GRCSE is possible; e.g., we could decide to create recommendations to insert systems engineering content into the curriculum of all engineering undergraduate or graduate programs since it is becoming increasingly clear that every engineer needs some education on systems engineering.</p> <p>The workshop, which will be held on two consecutive mornings, is open to all interested IW attendees. However, only those who attend the first morning should attend the second morning. That will allow us to make maximum progress.</p>	BKCASE
Requirements WG @ IW2019	08:00	10:00	Open/Working session	Pier 5	<p>08:00-09:00 "Utilizing MBSE for Requirements Engineering and V&amp;V Activities" – presentation &amp; discussion (MBSE Related)</p> <p>09:00-10:00 "Actionable Requirements Definition Using an EARS Opinionated Object Process Model" – presentation &amp; discussion (MBSE Related)</p>	Requirements; MBSE
Systems Science WG	08:00	17:00	Open/Working session	Pier 2+4	<p>Systems Literacy (Tuddenham), 3 hrs</p> <p>System Patterns &amp; Languages (Schindelf?)</p> <p>Category Theory (Lloyd?)</p>	Systems Science;
Test Case Generation	08:00	10:00	Open/Working session	Executive Suite 1634	Define approaches to test case generation	IV&V;
Professional Development Portal Budget & Planning Competency WG Sessions	08:30 09:00 09:00	09:00 10:00 10:00	Open Closed Open/Working session	Salon D Pier 1 Executive Suite 1735	Competency working sessions to start development of the Assessment Guide and to discuss next steps for the Competency Framework, including secession planning.	Competency;
Configuration Management Working Group	09:00	11:30	Open/Working session	Executive Suite 1734	Being working to charter objectives of the working group. Targeting 2 hour session. See a 30 minute break 10-10:30am Monday. Suggesting 9-11:30 time window.	Configuration Management NextGen;
DEIX - Modeling the Exchange of MBE Information	09:00	12:00	Open/Working session	Pier 9+11	A working session to evolve the current state of the Digital Engineering Information Exchange models. The team will engage in collaborative sessions to model the digital viewpoint for Model-Based Engineering (MBE) Information in the first 1/2. Then the team will work to develop the logical model for exchanging MBE information between buyers, suppliers, and engineering disciplines.	Digital Engineering Information Exchange WG; MBSE;
Human-Systems Integration Working Group	09:00	12:00	Open/Working session	Salon A	This meeting will gather people who would like to be involved in INCOSE HSI WG to expand ideas, concepts, methods and tools. We will continue to elaborate HSI content for the SE Handbook.	Human-Systems Integration;
NAFEMS-INCOSE Systems Modeling and Simulation WG	09:00	12:00	Open/Working session	Salon BC	Annual meeting of SMSWG held at INCOSE IW, with presentations and discussion covering the whole scope of this joint NAFEMS-INCOSE WG.	NAFEMS-INCOSE Systems Modeling and Simulation WG; MBSE;
System and Software Interface WG	09:00	11:00	Closed	Executive Suite 1635	Work on software engineering guidance for systems engineers. Review what is available and organize it into a usable "primer" with links for everything.	Systems and Software Interface;
System of Systems Working Group	09:00	17:00	Open/Working session	Pier 7	<p>SoSWG Working sessions</p> <p>0900-1000 SoS Standards (Yokell, lead)</p> <p>1000-1200 Reserve</p> <p>1300-1500 SoS Competencies (Harding lead, Wilson support)</p> <p>1530-1700 Assurance (Kemp/Wilson co-lead, with safety and security)</p>	Systems of Systems Engineering;
Systems Engineering Transformation	09:00	10:00	Open/Working session	Pier 10	Work on Systems Engineering Transformation Products	MBSE Patterns; MBSE;

IW2019 - Schedule by Day

Break	10:00	10:30	Open	Ballroom Foyer		
CIPR Working Group - 2019 Publications Planning	10:00	12:00	Open/Working session	Executive Suite 1634	CIPR Working Group discussion and planning for 2019 publications. These include: 1) CIPR Primer 2) Appendix to InfraGard's "Powering Through 2.0" 3) CIPR-themed volume of INCOSE INSIGHT	Critical Infrastructure Protection and Recovery;
IS2019 Technical review	10:00	16:30	Closed	Pier 6	Finalization of IS2019 reviews and draft program	
MBX Ecosystems/OpenMBEE Workshop - Breakout	10:00	15:00	Open/Working session	Salon G	This is a parallel breakout session on Mon Day1 for the modeling environment stakeholder communities (see description for the main session occurring on Mon 8:00-17:00).	MBSE Initiative; MBSE;
Competency WG Sessions	10:30	12:00	Open/Working session	Executive Suite 1735	Competency working sessions to start development of the Assessment Guide and to discuss next steps for the Competency Framework, including secession planning.	Competency;
Fellows Meeting	10:30	12:00	Open	Executive Suite 1619		
Integration Issues	10:30	12:00	Open/Working session	Pier 1	Discussion of experiences and issues to be addressed in systems integration.	IV&V;
Requirements WG @ IW2019	10:30	12:00	Open/Working session	Pier 5	10:30-11:30 "Requirements Efficiency: External Questionnaire Results" – presentation & discussion (MBSE Related) 11:30-12:00 Ask the experts/Other topics as they evolve	Requirements;MBSE
Student Division Strategy Meeting	10:30	12:00	Closed	Executive Suite 1705		Student Division
Systems Engineering Tools Database SE Project Planning	10:30	12:00	Closed	Pier 3	Establish a multiple year SETDB Technical Project Plan	Tool Integration and Model Lifecycle Management;
Systems Engineering Transformation	10:30	12:00	Open/Working session	Pier 10	Work on Systems Engineering Transformation Products	MBSE Patterns; MBSE;
Lunch	12:00	13:00	Open	Lighthouse Ballroom		
Academic Council	13:00	15:00	Open	Salon A		
Agile Systems & SE WG IW19 Workshop	13:00	18:00	Open/Working session	Pier 9+11	IW19 Agile Systems & SE WG Workshop will review projects in process, collaborations in process, consider new projects, and discuss whatever you like. See WG Connect Site IW19 folder in shared documents for agenda and GlobalMeet link. Monday 0900-1700, Pacific Time.	Agile Systems and SE;
Americas Sector - Regional Model	13:00	15:00	Closed	Executive Suite 1634		
Automotive WG: Cross WG about ITS architecture frameworks	13:00	15:00	Open/Working session	Executive Suite 1619	ITS standards (Architecture Frameworks) like CVRIA: Adoption by industry domains (awareness, position -pros&cons-, ease, ...). Working meeting with Transportation WG, Infrastructure WG and System of Systems WG	Automotive;Infrastructure; Systems of Systems Engineering;Transportation; MBSE;
CIPR Working Group - Inter-working group collaboration	13:00	15:00	Open/Working session	Executive Suite 1734	Open meeting to discuss inter-working group collaboration and project plans. Members / representatives from any of the working groups are invited.	Critical Infrastructure Protection and Recovery;Object-Oriented Systems Engineering Method;Power & Energy;
Competency WG Sessions	13:00	15:00	Open/Working session	Executive Suite 1735	Competency working sessions to start development of the Assessment Guide and to discuss next steps for the Competency Framework, including secession planning.	Competency;
Lean Systems Engineering Work Group Discussion: Lean Systems Design & Sandia National Lab Lean MBSE Product Creation Initiative	13:00	15:00	Open/Working session	Pier 8	Gain input to presentations and initiative workplan.	Lean Systems Engineering;MBSE;
MBSE Patterns WG meeting #2 of 2 at IW2019	13:00	17:00	Open/Working session	Salon B	Meeting 2 of 2 by INCOSE MBSE Patterns WG at IW2019. Agenda will be posted at <a href="http://www.omgwiki.org/MBSE/doku.php?id=mbse:patterns:mbse_patterns_wg_participation_in_incose_iw2019">http://www.omgwiki.org/MBSE/doku.php?id=mbse:patterns:mbse_patterns_wg_participation_in_incose_iw2019</a>	MBSE Patterns; MBSE;
Model Based Enterprise Capabilities Matrix	13:00	15:00	Open/Working session	Salon C	Model-Based Enterprise Capabilities Matrix Challenge Team will review the draft completely populated Matrix and associated User's Guide. This workshop portion will present the products, discuss INCOSE adoption, and give participants the opportunity to discuss application and use	Model-Based Conceptual Design; MBSE;
Production and Logistics Systems Modeling Challenge Team	13:00	16:00	Open/Working session	Pier 10	Meeting to support the production and logistics systems modeling challenge team. Discuss the output of 2018 work items and plan 2019 work items.	Production and Logistics Systems Modeling Challenge Team; MBSE;
Requirements WG @ IW2019	13:00	15:00	Open/Working session	Pier 5	13:00-15:00 Joint meeting with the IV&V WG on developing the Guide to Validation & Verification	Requirements;MBSE
Systems Engineering Tools Database SE Project Planning	13:00	15:00	Closed	Pier 3	Establish a multiple year SETDB Technical Project Plan	Tool Integration and Model Lifecycle Management;
TIMLM WG : LOTAR for MBSE - The Digital Lifecycle	13:00	15:00	Open/Working session	Salon F	The MBSE for PDES adventure, the LOTAR MBSE project, the Aerospace and Defense PLM Action Group MBSE Project, and the PDES-INCOSE MoU will be discussed.	Tool Integration and Model Lifecycle Management; MBSE;
Events core planning committee	14:00	15:00	Closed	Pier 1	Operations coordination	
IT Strategy Meeting	14:30	16:00	Closed	Executive Suite 1718		
Break	15:00	15:30	Open	Ballroom Foyer		
CIPR Working Group - EnergyTech 2019 Planning	15:00	17:00	Open/Working session	Executive Suite 1734	Meeting between CIPR, OOSEM, and P&E working groups to discuss and plan EnergyTech 2019.	Critical Infrastructure Protection and Recovery;Object-Oriented Systems Engineering Method;Power & Energy;
Knowledge Management Group (Ontologies)	15:00	17:00	Open/Working session	Salon G	Knowledge Management (Ontologies) group IW Meeting. Review of current ongoing projects.	Knowledge Management; MBSE;
New working group formation: SE for Early Stage R&D	15:00	17:00	Open/Working session	Executive Suite 1634	Gather interest and work on the charter for a new working group: SE for Early Stage R&D. This working group involves FFRDCs, UARCs, national laboratories, and public and private international research organizations.	SE for Early Stage R&D
TWG - Planning and Working Session	15:00	17:00	Open/Working session	Pier 8	Strategy & Planning Session for the TWG for 2019 activities Report and review of 2018 activities Discussion of APTA Systems Integration Standard project - update & status	Transportation;
ABET Discussion	15:30	17:30	Open/Working session	Executive Suite 1635		
Asia Oceania Sector Directors meeting	15:30	17:00	Open	Executive Suite 1619		
Competency WG Sessions	15:30	17:00	Open/Working session	Executive Suite 1735	Competency working sessions to start development of the Assessment Guide and to discuss next steps for the Competency Framework, including secession planning.	Competency;
Events - IS2020 Meeting	15:30	18:00	Closed	Pier 1		
Nominations & Elections	15:30	17:00	Closed	Salon A		
Requirements WG @ IW2019	15:30	17:00	Open/Working session	Pier 5	"Sharing requirements – a case study using REQIF" - presentation & discussion (MBSE Related)	Requirements;MBSE
Sector I Leaders meeting	15:30	17:00	Open	Salon D		
Systems Engineering Tools Database SE Project Planning	15:30	17:00	Closed	Pier 3	Establish a multiple year SETDB Technical Project Plan	Tool Integration and Model Lifecycle Management;
TIMLM WG : LOTAR for MBSE - The Digital Lifecycle	15:30	17:00	Open/Working session	Salon F	The MBSE for PDES Adventure, the LOTAR MBSE project, the Aerospace and Defense PLM Action Group MBSE Project, and the PDES-INCOSE MoU will be discussed.	Tool Integration and Model Lifecycle Management; MBSE;

Sector I Leaders Meet & Greet reception	17:00	18:00	Closed	Salon D		
<b>Tuesday</b>						
Systems Thinking Roundtable	07:00	08:00	Open/Working session	Salon A		Systems Science;
SEBoK meeting	08:00	15:00	Open/Working session	Pier 8		SEBoK
Automotive WG: System and Software	08:00	10:00	Open/Working session	Salon A	Exchange between Automotive WG & Software and Systems Interface WG (SaSIWG), general, and in particular : Autosar, MBSE-MBSW, CI	Automotive;System and Software Integration;
Empowering Women Working Meeting - Open to All	08:00	10:00	Open/Working session	Salon C	All those who share a vision of balanced gender representation in engineering, please consider attending this working session that is open to all. The Empowering Women as Leaders in Systems Engineering (EWLSE) group will be working on a set of activities for the coming years. After an introduction and review of EWLSE activities in progress and the INCOSE IW agenda, members will work on the following activities: planning for a new book on systems engineering to be published by Springer Hill and written and edited by women as one of a series of engineering books authored by women, defining resources to support systems engineering mentoring and obtaining leadership goals for all, and planning for external and internal (within INCOSE) outreach in 2019 and 2020. We will spend the last 15 minutes on wrap-up and collecting everyone's input for an INCOSE Newsletter article on lessons learned. Our outreach meeting follows this meeting, after the morning break! And then we will gather at a few tables at the final IW day INCOSE lunch for socializing and networking.	EWLSE; Empowering Women as Leaders in Systems Engineering
INCOSE Oil & Gas Working Group	08:00	12:00	Open/Working session	Executive Suite 1634	To introduce the Oil and Gas Working Group, have subgroup sessions, and discuss plans for 2019.  8-8:30 O&G WG Overview 8:30-9:30 Subgroup 3 - Standards 9:30-10 Requirements Quality 10-10:30 ReqIF Interchange Open Discussion 10:30-11:30 2019 Planning - Value of SE - O&G Competencies - 2019 Candidate Projects 11:30-12 Summary and Closing	Oil & Gas;
MBX Ecosystems/OpenMBEE Workshop	08:00	15:00	Open/Working session	Salon FG	This Tue Day2 continues the subject workshop (see description for the main session occurring on Mon).	MBSE Initiative; MBSE;
Part 2 of the Workshop on the Future of the Graduate Reference Curriculum for Systems Engineering (GRCSE)	08:00	12:00	Open/Working session	Pier 9	This is Part 2 of the GRCSE workshop begun on Monday, January 28. Please see the Part 1 description to learn more.  Only people who attended the Monday morning session should participate in Part 2.	BKCASE
Requirements WG @ IW2019	08:00	10:00	Open/Working session	Pier 5	Discuss updates to the "Guide for Writing Requirements"	Requirements;MBSE
SETDB Operations and Maintenance Procedures	08:00	10:00	Closed	Pier 3	Development of SETDB Operations and Maintenance SOPs	Tool Integration and Model Lifecycle Management;
System of Systems Working Group	08:00	12:00	Open/Working session	Pier 7	0800-1000 Ontology (Nilson) 1030-1200 Closing Business Meeting and Planning (Dahmann/Harding)	Systems of Systems Engineering;
Systems Science WG	08:00	15:00	Open/Working session	Pier 2+4	Systems Research & Development, c) Human agency in social systems (Gabriel), 2 hrs d) Pathologies of SE Projects (Troncale), 3 hrs e) Systems Mimicry/Pathology from Natural Systems (Troncale/Anway) – Joint with NSWG, 2 hrs	Systems Science;
Model Based Communities Meetup-Connections	08:30	11:30	Open/Working session	Salon H	The model-based engineering community is growing but segmented. This session is intended to reach out to our model-based colleagues in different segments, and discuss your ideas on actions to connect us further—including support for similar efforts by other societies, standards groups, events, etc.	MBSE Patterns; MBSE;
Competency WG Sessions	09:00	10:00	Open/Working session	Pier 11	Competency working sessions to start development of the Assessment Guide and to discuss next steps for the Competency Framework, including secession planning.	Competency;
Complex WG Meeting	09:00	12:00	Open/Working session	Executive Suite 1619		Complexity
INCOSE - SAE MoU Initiative	09:00	11:00	Open/Working session	Executive Suite 1718	Discussion of implementation of activities identified in INCOSE - SAE MoU including cross organization tutorials, alignment of standardization efforts, and development of new standards of common interest.	Standards Initiative
Policy Management Committee	09:00	12:00	Closed	Pier 10		
System safety working group - planning session	09:30	11:30	Open/Working session	Executive Suite 1735	To review progress from last year, what has gone well, what has gone not so well and agree plans for next year	System Safety
Break	10:00	10:30	Open	Ballroom Foyer		
CIPR Working Group - Leadership Meeting	10:00	12:00	Closed	Executive Suite 1734	CIPR Leadership planning meeting.	Critical Infrastructure Protection and Recovery;
IS2019 Technical review	10:00	14:00	Closed	Pier 6	Finalization of IS2019 reviews and draft program	
KMOWG (special event)	10:00	11:00	Open/Working session	Salon A		Knowledge Management; MBSE;
NSWG Future Planning	10:00	12:00	Open/Working session	Executive Suite 1635	Discuss ongoing and future working group projects	Natural Systems;
Systems Engineering Transformation	10:00	12:00	Open/Working session	Executive Suite 1705	Work on Systems Engineering Transformation Products	MBSE Patterns; MBSE;
Competency WG Sessions	10:30	12:00	Open/Working session	Pier 11	Competency working sessions to start development of the Assessment Guide and to discuss next steps for the Competency Framework, including secession planning.	Competency;
Empowering Women Outreach Meeting - Open to All	10:30	12:00	Open/Outreach session	Salon C	All those who want to learn about how to teach engineering to females - and males too - by going through a series of example activities demonstrating recommended approaches, please come to this meeting and experience the recommendations for yourself. We need teams of men and women to participate in this fun event. Teams will share their insights at the conclusion of the session. Please consider attending our working meeting that precedes this outreach meeting, before the morning break, and joining us as we gather at a few tables at the final IW day INCOSE lunch for socializing and networking.	EWLSE Empowering Women as Leaders in Systems Engineering
Requirements WG @ IW2019	10:30	12:00	Open/Working session	Pier 5	10:30-11:30 "Model-Based Requirements Engineering" – presentation & discussion (MBSE Related) 11:30-12:00 Closed session update WGIS, 2019 planning	Requirements;MBSE
SETDB Test Planning	10:30	12:00	Closed	Pier 3	Establishment of SETDB Test Plans	Tool Integration and Model Lifecycle Management;
TWG - Planning and Working Session	10:30	12:00	Open/Working session	Salon B	Focus on APTA Systems Integration Standard project - update & status	Transportation;
Training Working Group	11:00	12:00	Open/Working session	Salon A	· Determine our member's needs · Develop or solicit training modules · Solicit training volunteer instructors · Provide training as a benefit to INCOSE members · Coordinate training throughout INCOSE to expand training opportunities	Training;
Training Working Group	11:00	12:00	Open/Working session	Executive Suite 1718	· Determine our member's needs · Develop or solicit training modules · Solicit training volunteer instructors · Provide training as a benefit to INCOSE members · Coordinate training throughout INCOSE to expand training opportunities	All Working Groups
Lunch	12:00	13:00	Open	Lighthouse Ballroom		

Automotive WG	13:00	14:00	Open/Working session	Salon H	AWG : Miscellaneous topics and Wrap-up	Automotive;
CIPR Working Group open session	13:00	15:00	Open/Working session	Executive Suite 1734		Critical Infrastructure Protection and Recovery;
Digital View Model (DVM) Part II	13:00	15:00	Open/Working session	Salon C	Review Scope and Plan for the development of the Digital View Model project. Break out into groups to work on defining a concept model for the Digital View Model.  Develop a schedule for the Digital View Development project.  Identify how to address and include standards as part of the Digital View Model.	Digital Engineering Information Exchange; MBSE;
Enterprise Systems Working Group	13:00	15:00	Open/Outreach session	Salon B	Proposed agenda: • Review ESWG vision/mission/charter statement • Identify related WGs inside INCOSE and possible external collaborative partners • Commission mini-CFP for "paperless presentations" within an Enterprise-Systems domain/emphasis at IS2019 (due Feb. 15th!) • Identify & delegate next-stage tasks to build momentum for ESWG	Enterprise Systems;
KMOWG (Use Case event)	13:00	15:00	Open/Working session	Salon A		Knowledge Management;MBSE;
Planning for validation of deployment packages, preparing status report	13:00	15:00	Open/Working session	Pier 10	Definition of a strategy for the validation of ISO 29110 SE deployment packages and preparation of status report for the working group	Very Small Entities;
Requirements WG @ IW2019	13:00	14:30	Open/Working session	Pier 5	13:00-14:00 "Improving Requirement Quality using MBSE" - presentation & discussion (MBSE Related) 14:00-14:30 Ask the experts/Other topics as they evolve	Requirements;MBSE
RSWG Collaboration Meeting	13:00	15:00	Open/Working session	Executive Suite 1619	Discuss Collaboration with other Working Groups	Agile Systems and SE;Critical Infrastructure Protection and Recovery;Reliability;Resilient Systems;Risk Mgmt;SE Quality Management;Systems Science;Systems Security Engineering;
Science Basis for Systems Mimicry	13:00	15:00	Open/Working session	Executive Suite 1635	Discussion with Len Troncale on Isomorphic Patterns for SE Systems Mimicry/Systems Pathology from Studies of Natural Systems	Natural Systems;Systems Science;
SE Handbook Editors' Meeting	13:00	14:30	Closed	Executive Suite 1705	Editor meeting to consolidate inputs and continue the planning of the next edition of the SE Handbook.	Knowledge Management;
SETDB Wrap Up and Next Steps	13:00	15:00	Open/Working session	Pier 3	SETDB Wrap Up and Next Steps	Tool Integration and Model Lifecycle Management;MBSE;
Systems Engineering Principles Action Team	13:00	14:00	Open/Working session	Pier 1	The Systems Engineering Principles Action Team held a face to face in December 2018. The team agreed to meet at the IW to discuss go forward plans for soliciting INCOSE membership comments and rolling the Systems Engineering Principles into the SEBoK.	Complexity;Systems Engineering Principles Action Team
Telecommunications WG	13:00	15:00	Open/Outreach session	Executive Suite 1718	INCOSE's Australian Chapter (the Systems Engineering Society of Australia) has been running a Telecommunications Working Group for over a year. We are bringing this work to the INCOSE IW to look for input on the problems in both the telecommunications industry and also other areas that heavily rely on telecommunications services (such as government, defense, transportation), and how systems engineering practices can help. The working session will review the artifacts produced so far, and seek out problem areas for further efforts over the next 12 months.	Telecommunications
Closing Plenary	15:00	16:00	Open	Salon DE		
Closing Reception and Working Group Market Place	16:00	18:30	Open	Lighthouse Ballroom		
<b>Wednesday</b>						
Board of Directors Meeting	08:00	12:00	Closed	Pier 5		