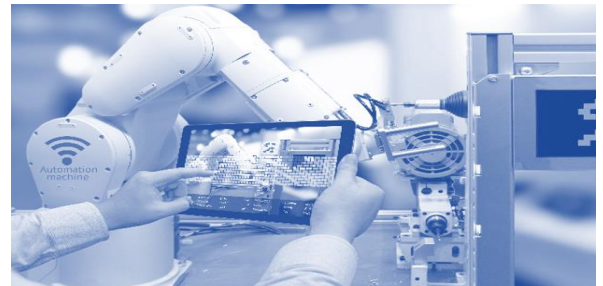


# First SIEMENS and ÉTS 4.0 Forum



“Integrating Industry 4.0 Technologies into Design, Manufacturing, Supply Chain and across the Total Enterprise”

Novembre 6, 2018  
École de technologie supérieure

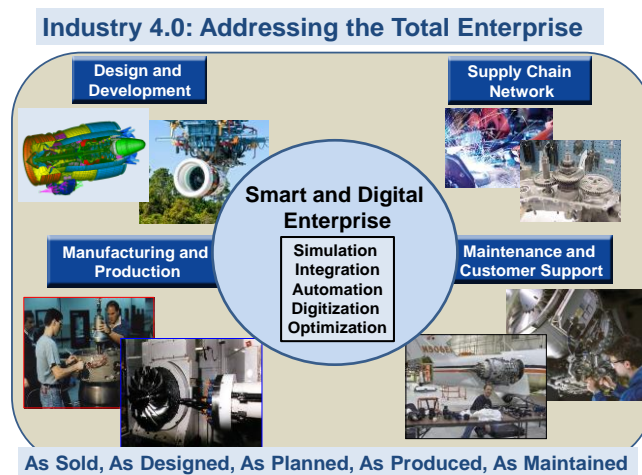
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The fourth industrial revolution “Industry 4.0” (Germany, 2011), with its automation, digitization and exponential technologies will change the landscape of the industry. It is characterized by optimization and management of assets, sharing and security of big data, tracking parts from cradle to grave: the “Digital Thread”, data analytics, Internet of Things (IoT) and Artificial Intelligence (AI). It is the transformation from physical to digital: the “Digital Twin” and from clusters to cloud computing. It is the “Democratization of Technology” where humans, computers, machines and products collaborate digitally and communicate seamlessly through integrated and optimized processes across the total product value stream both within an enterprise, and upstream (suppliers) and downstream (customers) of an enterprise. Industry 4.0 will drive a major change in tomorrow’s workforce. Compared to the previous three revolutions, Industry 4.0 is characterized by: real-time connectivity, speed of implementation, culture change and skills adaptation.



In order to address the needs of the aerospace sector, ÉTS, through its AÉROÉTS, mobilised its researchers and created in May 2016 Aerospace 4.0<sup>TM</sup>. Several discussions with industry and proposals were pursued. This resulted in a major project with Siemens AGT which involves three universities (ÉTS, Concordia and McGill) and 22 professors. The project covers the design, manufacturing and supply chain aspect. In order to provide an integration platform for Industry 4.0 technologies into those three organizations, a “Siemens’ Chair on Industry 4.0 Technology Integration” was created.

Part of the Chair’ deliverables is to hold a yearly Siemens Forum in order to address how the various Industry 4.0 technologies: Big data, AI, IoT, simulation, optimization, automation, systems integration, smart and additive manufacturing, robots, etc., could be integrated into design, manufacturing and supply chain as well as across the total enterprise.

On behalf of ÉTS and Siemens and our two partnering universities, Concordia and McGill, I would like to invite you to the First Annual Siemens Forum on Industry 4.0 Technology Integration.

Best regards

Hany Moustapha, Ph.D.  
Fellow ASME, CAE, CASI and CSME  
Professor and Siemens Chair on Industry 4.0 Technology Integration  
École de technologie supérieure (ÉTS)  
Pratt & Whitney Canada Senior Research Fellow

# PROGRAM - TUESDAY, NOVEMBER 6<sup>TH</sup> 2018

TIME	TOPIC	SPEAKER
8:30-9:00	Participant registration	
9:00-9:15	Welcome Address	Pierre Dumouchel, General Director, École de technologie supérieure Thomas Scarinci, Senior Vice President, Siemens AGT, Canada
9:15-9:45	Siemens Digital Factory	Michael Gardiner, Director, Digital Factory, Siemens Canada
9:45-10:15	Industry 4.0: Technology and Skills Challenges	Hany Moustapha, École de Technologie Supérieure
10:15-10:30	Coffee Break & Networking	
10:30-11:30	Integrating Industry 4.0 Technologies into Design	Martin Staniszewski, Manager, Siemens AGT (moderator) Daniel Varro, Professor, McGill University Gilles Bourque, Manager Aerodynamics, Siemens AGT Benoit Blondin, Manager Numerical, Pratt & Whitney Canada
11:30-12:30	Integrating Industry 4.0 Technologies into Manufacturing	Katherine Schmidt, Manager, Siemens AGT (moderator) Antoine Tahan, Professor, École de technologie supérieure Yaoyao Fiona Zhao, Professor, McGill University Antoine Proteau, Directeur Data Sciences, APN
12:30-13:30	Lunch	
13:30-14:30	Integrating Industry 4.0 Technologies into Supply Chain	Andrew Robinson, Manager, Siemens AGT (moderator) Nadia Bhuiyan, Professor, Concordia University Yvan Beauregard, Professor, École de technologie supérieure Esmeralda Cuaran Castro, Manager, Supply Chain, Siemens AGT
14:30-15:15	Integrating Industry 4.0 across the Enterprise	Carl Carson, Director Digitization, Siemens AGT (moderator) Christian Faucher, Director EPLM, Pratt & Whitney Canada Paul Bousquet, Manager PLM, Siemens AGT
15:15-15:30	Coffee Break & Networking	
15:30-16:00	Digital Innovation at Siemens	Frédéric Villeneuve, Director, Digital Innovation, Siemens USA
16:00-16:30	Réseau des Centres d'Expertise Industrielle 4.0	Pascal Monette, Président et Directeur Général, ADRIQ

## INAUGURATION COCKTAIL

17:00-17:20	<b>Pôle Innovation 4.0 Hub ÉTS Montréal</b>	Pierre Dumouchel, École de technologie supérieure
17:20-17:40	<b>Siemens' Chair on "Industry 4.0 Technology Integration"</b>	Thomas Scarinci, Siemens AGT Hany Moustapha, École de technologie supérieure

## SOIRÉE DES CYCLES SUPÉRIEURS SIEMENS INDUSTRY 4.0 PROJECTS :

18:00-18:20	<b>Industrial Cluster: Next Generation Manufacturing Canada "NGMC"</b>	David Fransen, Chief Strategy Officer, NGMC
18:20-18:40	<b>Digital Multidisciplinary Analysis and Design Optimization (DMADO)</b>	Daniel Varro, Professor, McGill University
18:40-19:00	<b>Advanced Manufacturing Automation, Digitization and Optimization (AMADO)</b>	Antoine Tahan, Professor, École de technologie supérieure
19:00-19:20	<b>Digital Technology Platform for Supply Chain (DTPSC)</b>	Nadia Bhuiyan, Professor and Vice Provost, Concordia University
19:20-19:40	<b>Networking</b>	

