

Tech Forward

Purpose: To kickstart a series of campus conversations to position Michigan Tech as an internationally recognized academic thought leader in the Fourth Industrial Revolution.



**Michigan
Technological
University**

WHY: Disruptive Forces

Data Sources

There is an explosion of sensors and data inputs everywhere - security cameras, cell towers, cars, phones, buildings, web, social media; where we are, what we do, what we read, what we buy - plus the world around us that we don't even observe can now be sensed and data gathered - more is known about more things than ever before - and the numbers are exploding.

Networks

These data sources are connected to networks - fiber optics, cellular, WiFi, Bluetooth, Near Field Communications, IOT, etc. More communication technologies are being created and everything is connected to everything; the number of things connected is exploding.

Big Data

These networks collect the data on just about everything and that data becomes accessible everywhere - where it can be processed. Out of this data comes information on about any topic imaginable. Databases are exploding.

Machine Learning

Algorithms for extracting information from large data sets have advanced beyond our imaginations. Machines can extract information from large data sets that humans are not able to extract. Just as robots can now do tasks humans can't do, machine learning can now learn what humans have not been able to learn. Knowledge is exploding.

People

The impact of Fourth Industrial Revolution will change everything. Obviously, it impacts all forms of science and engineering, but it is also impacting medicine, law, social science, government, journalism, music, entertainment, the liberal arts, in fact, every aspect of our lives. The Fourth Industrial Revolution will change everything. We must prepare ourselves as much as possible for this disruption.

WHAT: Campus Conversations

Campus Conversations Kick-Off with President Koubek

September 18, 4:30 - 6:00 PM, Rosza Center

Prepare Students

Responsive Research

Campus Conversations Summary with President Koubek

December 12, 4:30 - 6:00 PM, MUB Ballroom

HOW:

Strategic Initiatives

FALL 2018

SPRING 2019

Prepare Students

Campus Conversations
Faculty, Staff, and Students

Oct 2 10:30 AM - Noon Rosza Center	Oct 5 10:30 AM - Noon Rosza Center
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Disruptive Forces

Industry Panel: 14 Floor CEOs
Faculty, Staff, and Students

Oct 16
2:00 - 3:30 PM
Rosza Center

Responsive Research

Campus Conversations
Faculty, Staff, and Students

Nov 6 10:30 AM - Noon Rosza Center	Nov 9 8:30 - 10:00 AM Rosza Center
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Prepare Students

Campus Conversations
Faculty, Staff, and Students

Nov 15 2:30 - 4:00 PM Rosza Center	Nov 16 1:00 - 2:30 PM Rosza Center
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The Board of Trustees
Progress Report
Feb 27

mtu.edu/techforward