**BROADEN HORIZONS** | EXTEND MINDS



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Rig Technologies, NOV

Houston

Date: Friday, October 14, 2022

**Time**: 1 - 1:50 pm

**Location**: Melcher Hall 180

## IE Principles

## - Example Applications and Business Impact

Abstract: NOV pioneers innovations that empower the global energy industry to safely produce abundant energy while minimizing environmental impact. We are a worldwide leader in providing major mechanical components for traditional oil and gas as well as for the energy transition. During this seminar we will review the application of certain Industrial Engineering (IE) concepts in a large industrial setting where a variety of products are manufactured within a wide range of volumes and complexity. Simple traditional IE concepts such as Forecasting, and Capacity Planning & Scheduling are powerful performance drivers as much as more advanced concepts such as Machine Learning and NLP. We will see example applications on each. Additionally, a common theme that runs across these is the need and the ability to exploit large amounts of data. A strong technical grounding in the IE principles with some exposure to aspects of data science makes for a strong skill set that is indispensable in the industry of today. Given that, we will also discuss IE related career opportunities within NOV to help you evaluate fit with your career aspirations.

**Biography**: Sushanta Sahu is the Director of Manufacturing Systems for the Rig Technologies segment at NOV Inc., headquartered in Houston TX. His team provides strategic support to the segment's global manufacturing operations. His focus is on ensuring Manufacturing Fundamentals, Operational Excellence, Process and Technology Innovation, Implementation of Strategic Initiatives, and Quality and Training support. Sushanta has a Ph.D. in Industrial and Systems Engineering from the University of Wisconsin at Madison, a Master's in Industrial Engineering from the University of Illinois at Urbana-Champaign, and a bachelor's degree in Mechanical Engineering from the Birla Institute of Technology and Sciences, Pilani, India. He also holds a certification in Manufacturing Leadership from the Rice University.