

DIGITAL TRANSFORMATION (DTX)

DTX 507: Digital Transformation and the Changing World of Work (3 credits)

Breakthroughs in cloud computing, artificial intelligence, the Internet of things (IoT), augmented reality, blockchain and cybersecurity have set the stage for a new industrial revolution (4.0) in this country and around the world. Entirely new products and services are emerging, as are new and better ways of creating, producing, and delivering these new offerings. This course provides the historical and current context for managing in this rapidly changing world – a world of digital opportunity so pervasive and disruptive that virtually every sector of the economy is being transformed by it; hence the term – digital transformation (Dx). What are some of the new products and services? How will existing value chains be altered? What kinds of jobs will be impacted? Who are the vendors in this transformation? What are the challenges and what are the opportunities? How are these technologies converging to create new products and services, and enhanced value chains in the healthcare, manufacturing, finance, insurance, and education sectors of our economy?

DTX 587: Tools for Digital Transformation (3 credits)

This course provides students with exposure to many of the enabling technologies at the heart of digital transformation in this region, i.e., cloud computing, AI, the Internet of things (IoT), augmented reality, blockchain, and cybersecurity. Who are the key vendors? What are the pros and cons of implementing each of these technologies? What kind of checklist is needed to implement such technologies? Where is your organization on the digital transformation continuum? And what is the vocabulary needed to discuss these technologies with vendors and management?

DTX 607: Managing Digital Transformation (3 credits)

This course introduces students to the current best practices for exploring and implementing digital transformation in our organizations. What is the relative state of urgency in your organization? How can we diagnose organizational capability and set the stage in our organizations for starting a digital transformation? What models can we use to articulate your organization's value chain and opportunities for improvement? What planning canvases can we use to brainstorm and guide the digital transformation (Dx) process? How can we use design thinking to break through established norms and complexities in our value chains? What kind of expertise is needed? What can be outsourced? And finally, what is the role of leadership in promoting and guiding this kind of change?