



ADVANCED DATA ANALYTICS FOR IIOT AND SMART MANUFACTURING

June 20–23, 2023 | Instructor: Brian Anthony | professional.mit.edu/aism

Note: All times are US Eastern Daylight Time. Schedule is subject to change.

	TUESDAY, JUNE 20	WEDNESDAY, JUNE 21	THURSDAY, JUNE 22	FRIDAY, JUNE 23
8:00–8:30 AM	Program Registration			
9:00–10:15 AM	Course landscape Cases for context: Food, fiber, packaging, complex assemblies	Manufacturing systems modeling and optimization Digital twinning / Modeling	Machine learning for design	Conditions and anomalies
10:15–10:30 AM	Break	Break	Break	Break
10:30 AM–12:00 PM	Learned models of processes	Learned models of manufacturing systems	Inverse imaging problems Machine learning and optimization	Condition monitoring Trees and regressors
12:00–1:00 PM	Lunch	Lunch	Lunch	Lunch
1:00–2:30 PM	Learned digital twins of process used for design, simulation and control/optimization	Learned digital twins of systems used for design, simulation and control/optimization	Security and systems Data security, encryption and learning	Training for anomaly detection Video based condition monitoring
2:30–2:45 PM	Break	Break	Break	Break
2:45–4:14 PM	Hands on exercises: Project options, teaming, and start Continuous processing	Examples and group work Systems / Line	Examples and group work Design and inverse problems	Group work and presentations Complex assembly and test
4:15–4:30 PM	Break	Break	Break	Close
4:30–5:00 PM	Review and Recap of the Day	Review and Recap of the Day	Review and Recap of the Day	