

# Transforming Manufacturing Education

Autodesk® and ASME collaborate on cutting-edge Industry 4.0 Modular Learning Content, empowering time to talent acceleration with real-world examples as requested by faculty.



## ▶ TIME TO TALENT CHALLENGE

Rapid technological transformations + Emphasized focus on theory in engr. education

≡ Widening gap of “time to talent”

### ▼ CHALLENGES FOR EDUCATORS

#### 🕒 TIME

Difficult to stay abreast of constant shifts and development.

#### ⚙️ DIFFICULT ADJUSTMENT

Faculty struggle with adapting to new concepts.

#### 📖 GAPS IN CURRICULA

Lack of hands-on exp. on sustainability, advanced mfg. & interdisciplinary skills.

#### 📦 LIMITED RESOURCES

Equipment and funding are scarce.

### ▼ TOP SKILLS ACROSS 3 ROLES

#### MECHANICAL ENGINEER

Design for Manufacturing

Generative Design

AI/ML

#### MANUFACTURING ENGINEER

CNC Machining

Robotics

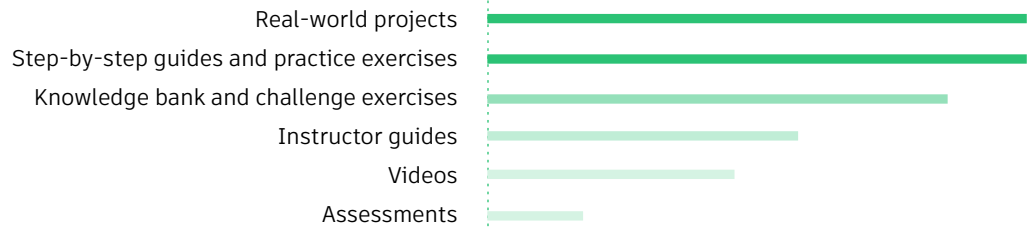
Integrated CAD/CAM

Simulation

#### CNC MACHINIST

Additive Mfg.

### ▼ EDUCATORS’ DESIRED RESOURCES



## ▶ THE SOLUTION

Autodesk & ASME have solved this challenge by providing customized, rich, modular Industry 4.0/advanced manufacturing learning content for both students and faculty.

- ▶ Self-Assessment
- ▶ Faculty Instructor Guides
- ▶ Practical, Bite-Sized Projects
- ▶ Instruction
- ▶ Summative Assessments

### KEY TAKEAWAYS

- ▶ Leverage university industry boards & keep current on workforce developments.
- ▶ ABET’s criteria provides ample scope for personalized learning.
- ▶ Incorporating real-world projects in class-room to inspire students about engineering.
- ▶ More than 77% of design and manufacturing respondents prioritize technology, new products/services, and AI/emerging technologies for future investment.\* Accelerating Industry 4.0 education is critical to success.

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\* Autodesk’s 2024 State of Design & Make report