**UCONN**
SCHOOL OF ENGINEERING

An interdisciplinary MS level graduate program aimed to train highly trained engineers in response to long-term workforce and technology needs of the advanced energy products manufacturing industry

PI: Ugur Pasaogullari

AMES Features:

❑ Housed at School of Engineering, ensuring a truly interdisciplinary approach, and rapid response to changing needs of the industry

❑ Built on a new curriculum that is supported by new common courses designed for cross-cutting skills, and multiple tracks that target challenges in advanced manufacturing for energy systems.

❑ Multiple tracks enable all engineering backgrounds to specialize in advanced manufacturing for energy systems.

❑ Features a Master of Engineering (MENG) extension for working professionals.

AMES Curriculum
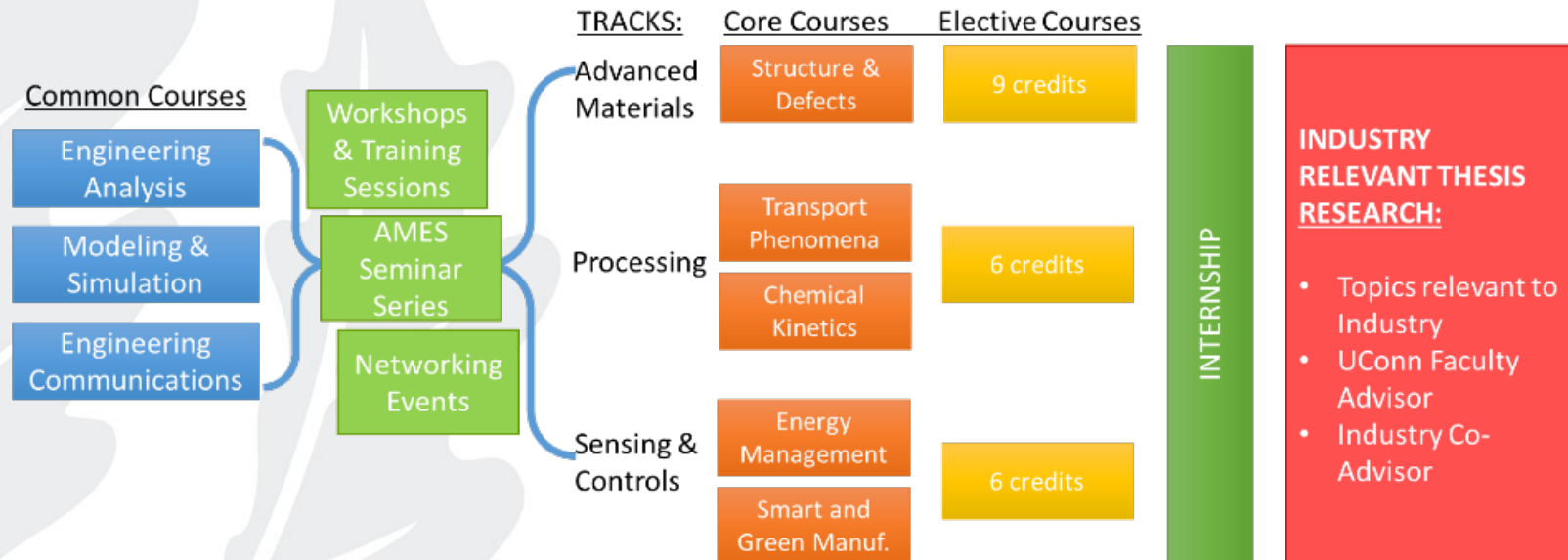
☐ Development of cross-cutting skills through common courses
☐ Tracks addressing all engineering backgrounds
- Advanced materials
- Processing
- Sensing & Controls
☐ Internship
☐ Seminars, Workshops, Networking Events

Industry Relevant Research Training

❑Thesis (MS) and Capstone (MENG) Projects
- UConn Faculty Advisor
- Industrial Partner Co-Advisor
- Industrially Relevant Research Topic

❑Internship at an Industry Partner Facility

Industry Partners
- Cabot Corporation
- Proton On Site
- Sustainable Innovations
- UTRC
- Applied Power Systems
- AzTrong
- Quantum BioPower
- Doosan Fuel Cells
- Giner, Inc.
- CT GreenBank

Implementation Plan

- First students of the program to start in Fall 2018
- 5-6 new students (funded by DoE) every year
  - Additional students through MENG extension
- Course development to start in Summer 2018
- UConn Engineering Diversity and Outreach office for recruitment of female and minority students
  - UConn LSAMP
- Courses (MOOC) and curriculum to be publicly shared
- Rigorous evaluation plan, continuous revision
  - ABET model for course outcomes, student achievements, data collection

Top Public Universities
in Terms of Percentage Gains in Female Engineering Graduates 2010-2015

Top 11 Public Universities with the Largest Gains in Female Engineering Graduates

UConn is #1
Women make up **24.3%** of UConn's engineering graduates. That's a **9.3%** increase in female graduates over the past 5 years and tops among public institutions nationally.