

Engineering Technology Degree Reform in Florida

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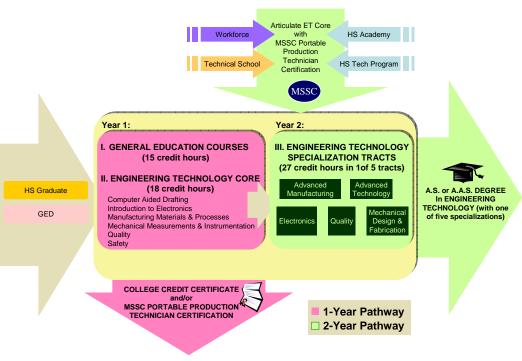
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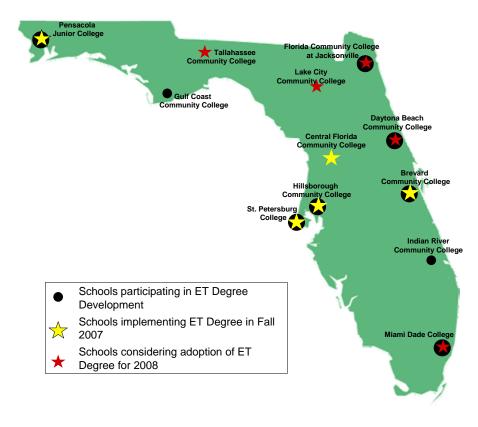
DEGREE DEVELOPMENT

- FLATE reviewed the Community College degrees related to manufactuiring and brought together all the Florida Community Colleges with these programs.
- Findingd included:
 - many degrees were outdated,
 - there was little allignment statewide, and
 - on industry didn't understand what competencies the graduates had.
- FLATE with Community College partners, designed and developed a new A.S./A.A.S. degree called <u>Engineering Technology</u> with 5 specialization tracts.
- In March 2007, Florida Department of Education approved the new A.S/A.A.S. degree in Engineering Technology and 9 college certificates associated with it.

Florida Engineering Technology Degree Model

A.S./A.A.S. Engineering Technology (60 credit hours)





DEGREE STRUCTURE

- The basic format is a "one-plus-one" approach.
- Year-one consists of a technical core and general education requirements.
 - The 18 credit hour "E.T. Core" curriculum covers introductory computer aided drafting, electronics, instrumentation and testing, quality, safety, and processes and materials.
 - The E.T. Core aligns with the Manufacturing Skill Standards Council (MSSC) Portable Production Technician certification.
- Year-two focuses on a specialization tracts which have both required and elective topics and requires the completion of the general education requirements.
- There are 5 approved specialization tracts.
- Each tract has several approved certificates and opportunities for adding more.
- ♦ There are 9 approved certificates in the 5 tracts.
- Each community college is free to adopt any or all of the specialization tracts with their certificates depending on local industry needs.
- The newly approved specialization tracts are:
 - Advanced Manufacturing
 - Advanced Technology
 - Mechanical Fabrication & Design
 - Quality

♦ Electronics

DEGREE IMPLEMENTATION

- Five community colleges have begun their institutional processes to adopt the new degree program and will have it available for students in the fall of 2007.
- ♦ The Engineering Technology degree is part of a much larger unified curriculum project. It reaches out to the high school technology programs and career academies, incumbent worker training and bachelor degree programs. Embedding the MSSC Skill standards into the E.T. Core automatically provides an articulation pathway from secondary programs that addresses these same industry skills. Students in these curricula that take and successfully complete the MSSC certification exams can articulate 15 credit hours towards the ET Associates Degree in a Florida college that offerss the degree. It also provides a pathway for incumbent workers to gain college credit by experience through the same certification.
- A.S./ A.A.S. Engineering Technology Degree completers can articulate directly into Bachelor's of Applied Science Degree programs at USF – Lakeland; UCF; FAMU; and St. Petersburg College or into the Engineering Technology B.S. degrees at UCF and FAMU.
- MSSC certification exam are offered at 8 testing centers across the state. Immplementation of the certification sites was conducted by the Employ Florida Banner Center for Manufacturing Education located at the Brandon campus of Hillsborough Community College.

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