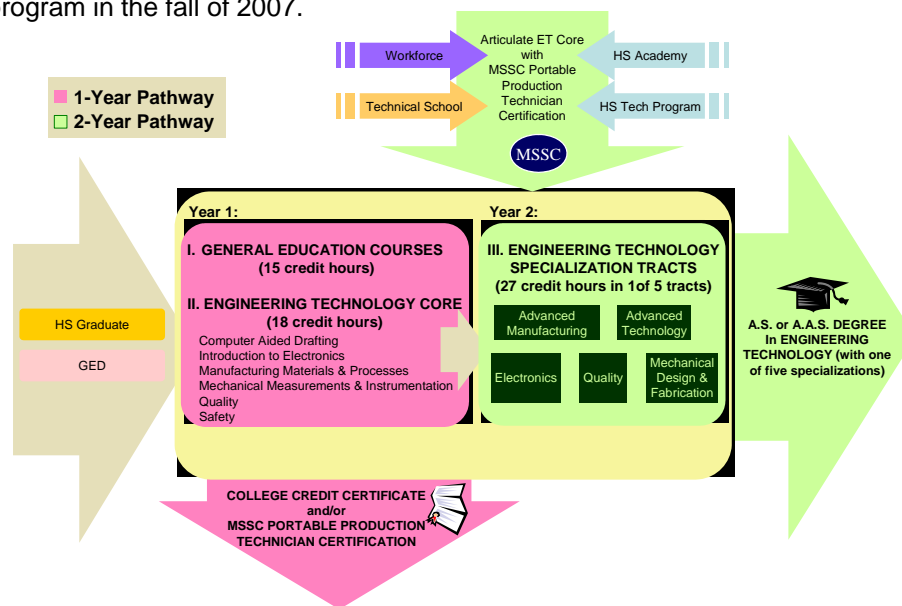


## THE ENGINEERING TECHNOLOGY A.S./A.A.S. DEGREE PROGRAM (SUPPORTING FLORIDA'S DIVERSE MANUFACTURING SECTOR)

The Florida Advanced Technological Education (FLATE) Center for Manufacturing Education's review and reform of the statewide Curriculum Frameworks has redefined the manufacturing and related curriculum in Florida at the state level. FLATE, working with the Florida Department of Education's Career and Technical Education team, Florida community colleges, and Florida industries has recently completed the first phase of this project. A new A.S./A.A.S. degree program in Engineering Technology (ET) with 5 specialization tracts and 9 specialization certificates was approved by the FL DOE in March 2007. The premise of this degree is a "one-plus-one" approach where in year-one the student takes their general education courses and a technical core curriculum that aligns with the Manufacturing Skills Standards Council (MSSC) Production Technician certification. The 18 credit hour "ET Core" covers introductory computer aided drafting, electronics, instrumentation and testing, quality, safety, and processes and materials. Year-two of the ET degree focuses on a specialization tract, each of which has some required and some elective topics. Each community college is free to adopt any or all of the specialization tracts and certificates depending on their local industry needs. The newly-approved tracts are: Advanced Manufacturing, Advanced Technology, Electronics, Mechanical Design & Fabrication, and Quality. Two additional specialization tracts in Industrial Design/Computer Aided Drafting and Industrial Operations will be added in fall of 2007. Five community colleges have begun internal institutional processes to adopt the new degree program and will implement the program in the fall of 2007.



This community college Engineering Technology degree is part of a much larger statewide unified curriculum project that reaches the high school technology programs and career academies, incumbent worker training, and bachelor degree programs. Embedding the MSSC Skill standards into the ET Core provides an industry-relevant articulation pathway from secondary programs that address these same industry skills. It also provides a pathway for incumbent workers to gain college credit by experience through certification. To ensure the success of this unified curriculum plan, FLATE has begun working with manufacturing related secondary programs to develop new secondary level curriculum frameworks to include the MSSC skills.

In the next phase of the project, FLATE will develop needed curriculum for the ET Core and provide professional development for high school teachers and community college faculty to ensure that students wishing to become MSSC certified are successful. FLATE will also provide support for colleges during their institutional implementation phase, as well as undertake a statewide promotional campaign for the unified curriculum aimed at educational communities (student, parents, counselors, teachers, etc.) and manufacturing industries.

FLATE serves the entire state of Florida and is one of over 32 Advanced Technological Education (ATE) Centers funded by the National Science Foundation (NSF) to enhance and promote the technician workforce for advanced technologies in the United States. To achieve this mission, all NSF-ATE Centers conduct activities in three areas: curriculum reform and/or development; student recruitment and retention into these technical programs (outreach); and professional development for technical secondary and post-secondary faculty. FLATE's leadership is a partnership among Hillsborough Community College (HCC), St. Petersburg College (SPC), and the USF College of Engineering (USF COE). For more information about FLATE, please visit [www.fl-ate.org](http://www.fl-ate.org).



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**Florida Department of Education  
Curriculum Frameworks  
Occupational Area: Industrial**

	CIP Number	Grade Level	Length	SOC	Program Title	Specialization Tract	Colleges
PSV	0615.061304	College Credit Course	18 Credit Hrs.	17-3029	Engineering Tech. Support Specialist		(as of 05.17.07)
PSV	0615.061300 1615.061300	AAS AS	60 Credit Hrs.	17-3027	Engineering Technology	Advanced Manufacturing	Hillsborough CC
PSVC	0615.061301	College Credit Certificate	12 Credit Hrs.	17-3027	Automation		Hillsborough CC
PSVC	0615.061302	College Credit Certificate	12 Credit Hrs.	17-3027	Lean Manufacturing		Hillsborough CC
PSVC	0615.061303	College Credit Certificate	12 Credit Hrs.	17-3027	Pneumatics, Hydraulics & Motors for Manufacturing		Hillsborough CC
PSV	0615.040301 1615.040301	AAS AS	60 Credit Hrs.	17-3029	Engineering Technology	Advanced Technology	Brevard CC
PSVC	0615.040302	College Credit Certificate	16 Credit Hrs.	17-3029	Applied Technology Specialist		Brevard CC
PSV	0615.030312 1615.030312	AAS AS	60 Credit Hrs.	17-3023	Engineering Technology	Electronics	Brevard CC St. Petersburg College
PSVC	0615.030313	College Credit Certificate	12 Credit Hrs.	17-3023	Electronics Aide		Brevard CC St. Petersburg College
PSV	0615.080500 1615.080500	AAS AS	60 Credit Hrs.	51-4012	Engineering Technology	Mechanical Design & Fabrication.	Pensacola JC
PSVC	0615.080502	College Credit Certificate	12 Credit Hrs.	51-4012	CNC Machinist		Pensacola JC
PSVC	0615.080501	College Credit Certificate	12 Credit Hrs.		Computerized Woodworking		Pensacola JC
PSV	0615.070201 1615.070201	AAS AS	60 Credit Hrs.	17-3026	Engineering Technology	Quality	Central Florida CC St. Petersburg College
	0615.070202	College Credit Certificate	12 Credit Hrs.	17-3026	Six Sigma Black Belt		St. Petersburg College
PSVC	0615.070203	College Credit Certificate	12 Credit Hrs.	17-3026	Lean Six Sigma Green Belt		Central Florida CC St. Petersburg College

*The Engineering Technology Curriculum Frameworks are posted on FLATE website: [http://www.fl-ate.org/partners/et\\_forum.htm](http://www.fl-ate.org/partners/et_forum.htm)*