



ENGINEERING TECHNOLOGY ASSOCIATE IN SCIENCE DEGREE PROGRAM DESCRIPTION

The Engineering Technology (ET) Associate in Science (A.S.) degree program at St. Petersburg College (SPC), prepares students for employment or provides additional training for persons employed in manufacturing and high technology industries. The 18 credit hour technical core of this degree is closely aligned with the national Manufacturing Skill Standards Council (MSSC) Certified Production Technician (CPT) industry certification, and endorsed by the National Association of Manufacturers (NAM). Students who have already earned the MSSC-CPT will receive 15 articulated credit hours towards the Engineering Technology degree. The Engineering Technology Associate in Science degree program is fully transferable to four year degree granting institutions.

ENGINEERING TECHNOLOGY A.S. (60 Credits)

SPC ET DEGREE SPECIALIZATIONS: Advanced Manufacturing, Digital Design & Modeling, Electronics, Quality.

ET TECHNICAL CORE (18 credits)

The ET core provides technical fundamentals for the ten specializations tracks of the ET Degree that supports many manufacturing and high technology industry sectors.

The ET technical core includes: CAD, Electronics, Measurement, Manufacturing Processes, Quality and Safety.

COLLEGE CREDIT CERTIFICATES

COMPUTER-AIDED DESIGN & DRAFTING (24 credits)

This certificate provides a program of study with courses in CAD and solid modeling needed to assist the engineering activities of industry and consultants in planning, designing, and detailing. Rapid Prototyping is utilized throughout the solid modeling courses.

ENGINEERING TECHNOLOGY SUPPORT SPECIALIST (18 credits)

This certificate prepares students for specialized areas supporting engineering design, manufacturing processes and production, testing, and/or maintaining product quality.

ELECTRONICS AIDE (12 credits)

The purpose of this certificate program is to prepare students for initial employment with an occupational title as electronics or electronics test technician in various specialized areas or to provide supplemental training for persons previously or currently employed in these occupations.

LEAN SIX SIGMA GREEN BELT CERTIFICATE (12 credits)

This certificate covers the methods used in Lean and Six Sigma such as continuous flow, overall equipment effectiveness (OEE), Kaizen, process mapping, the 5S's, total productive maintenance (TPM), cellular manufacturing, the DMAIC, self-directed work teams, the kanban system, design for manufacturing, and value stream mapping. The courses in this Green Belt certificate program are part of the Quality Specialty Subplan in the A.S. degree in Engineering Technology.





MECHATRONICS (30 credits)

The purpose of this certificate program is to prepare students for initial employment with an occupational title as Mechatronics Technician or System Integration Specialist in various specialized areas, or to provide supplemental training for persons previously or currently employed in these occupations. Mechatronics is a cutting edge field that combines the study of electronics, mechanical systems, control systems, and computers into one program.

SIX SIGMA BLACK BELT CERTIFICATE (12 credits)

This certificate is intended for manufacturing and services industries, and builds on the concepts of the Lean Six Sigma Green Belt Certificate. The program focuses on the theory and use of facts and data to improve customer satisfaction, reduce cycle time, and reduce defects. The courses in the Black Belt certificate are part of the Quality Specialization for the A.S. degree in Engineering Technology.

RAPID PROTOTYPING SPECIALIST (15 credits)

This certificate prepares students for initial employment with an occupational title as rapid prototyping, digital manufacturing specialist, industrial designers, product designers, or mechanical drafters, technicians, or detailers in various specialized areas of industry that use digital design and modeling and rapid prototyping, direct digital manufacturing or to provide supplemental training for persons previously or currently employed in these occupations.

