



## ENGINEERING TECHNOLOGY ASSOCIATE IN SCIENCE DEGREE PROGRAM DESCRIPTION

The Engineering Technology (ET) Associate in Science (A.S.) degree program at Northwest Florida State College (NWFSC), 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)

**NWFSC ET DEGREE SPECIALIZATIONS:** Advanced Technology, Digital Design and Modeling, Digital Manufacturing, Electronics, and Mechanical Design and Fabrication.

#### **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 NUMERICAL CONTROL (CNC) MACHINIST/FABRICATOR (12 credits)**

This certificate program will prepare students to meet the industry-specific skills needed for a manufacturing environment where machines do much of the labor, the human touch is needed to ensure consistent productivity and high quality goods. Computer numerical controlled (CNC) equipment operators set up and operate a variety of machines to produce precision parts and instruments. Machinists apply the knowledge of mechanics, mathematics, metal properties, layout, and machining procedures to fabricate parts and assemblies, repair machine tools, and maintain and troubleshoot industrial equipment.

#### **COMPUTER AIDED DESIGN & DRAFTING (24 credits)**

This certificate provides training in CAD and solid modeling needed to assist the engineering activities of industry and consultants in planning, designing, and detailing.

#### **DIGITAL MANUFACTURING SPECIALIST (24 credits)**

This certificate includes but is not limited to maintenance techniques, computer aided drafting/design skills, technical communications, maintenance and operation of various industrial components, quality control and testing, material handling protocols, and proper usage of tools and instrumentation.

#### **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.

#### **RAPID PROTOTYPING SPECIALIST (15 credits)**

This certificate provides a program of study with courses in solid modeling, using SolidWorks. By completing this certificate, the student will gain technical expertise supporting the advanced manufacturing industry such as planning, signing and detailing for Rapid Prototyping.

