

Department: **Department of Applied Technology**  
 Degree: **Bachelor of Science in Technology Studies**  
 Concentration: **Manufacturing Technology**

**TECS Core Requirements** – 32 credit hours

TECS 120 – Power, Energy, and Transportation (3)  
 TECS 130 – STEM in Technology Systems (3)  
 TECS 200 – Engineering Graphics (3)  
 TECS 312 – Graphic Communication Techniques (3)  
 TECS 318 – Introduction to Computer Aided Drafting (3)  
 TECS 480 – Industrial Management (3)  
 TECS 490 – Occupational Safety, Health, and Liability (2)  
 TECS 495 – Training & Instructional Systems (3) *Add OR* TECS 460 Teaching Technology Education (495 OR 460)  
 TECS 499 – Internship (9)-*Add OR TECS 406 Internship (3) OR TECS 606 Internship (3) (406/606 can be taken multiple times to earn the 9 credits of internship hours.)*

**TECS Manufacturing Technology** - 27 credit hours

TECS 119 – Introduction to Welding (3)  
 TECS 180 – Materials, Processes & Production (3)  
 TECS 240 – Plastic Processes (3)  
 TECS 260 – Metal Processes (3)  
 TECS 280 – Wood Processes (3)  
 TECS 331 – Machine Tool Operations (3)  
 TECS 375 – Robotics: Engineering Problem Solving (3)  
 TECS 420 – Fluid Systems: Hydraulics/Pneumatics (2)  
 TECS 430 – Computer-Aided Manufacturing (3)  
 TECS 440 – Maintenance & Repair of Equipment (1)

**TECS Elective** – 9 credit hours (NEW) *Addition of a total of 9 hours of TECS Electives. (Addition of TECS Elective credits is to align with new reduced KBOR General Education to earn the 120 credits for the BS degree.)*

**FREE Elective** – 5 credit hours (NEW) *Addition of a total of 5 hours of FREE Electives. (Addition of FREE Elective credits is to align with new reduced KBOR General Education to earn the 120 credits for the BS degree.)*

**TECS Management Requirements** – 6 credit hours

MGT 101 – Intro to Business (3)  
 MGT 301 – Management Principles (3)

**TECS General Education Requirement for Association of Technology, Management, and Applied Engineering (ATMAE) Accreditation** – 16 credit hours (Credits should be taken as part of the General Education course work.)

MATH 101 – Liberal Arts Mathematics (3) *or* MATH 110 – College Algebra (3)  
 MATH 250 – Elements of Statistics (3) *or* MATH 234 Analytic Geometry & Calculus I (3)  
 GSCI 100 – Introduction to Geology (3)  
 PHYS 102 – Physical Science (3)  
 PHYS 103 – Physical Science Laboratory (1) *or* GSCI 102 – Introduction to Geology Lab (1)  
 TECS 391 – Technology in Society (3)

**General Education Requirements:** KBOR 34 hours General Education + TECS Additional MATH & Physical Science.

**Total Hours – (120 Hours)**

TECS Core	32
Manufacturing Technology Content	27
TECS Elective	9
FREE Elective	5
TECS Management	6
Additional MATH	3
Additional Physical Science	3
General Education + Seminar	35
	120