

College of Basic and Applied Sciences — Upper Division Form 2019-2020
(Requires 124 total credit hours)

Student name _____ Student # _____
 Major Engineering Technology Minor _____
 Concentration Mechanical Engineering Tech. E-mail _____

Instructions: For students graduating in Summer 2019 or later. One (1) copy signed by major and minor advisors should be filed with the Graduation Analyst in DSB 120 three semesters prior to graduation. An Intent to Graduate form must be submitted with this form.

General Education	Course	Semester	Grade	Notes	Credit Hours
COMMUNICATION (9 hours)	ENGL 1010				3
	ENGL 1020			Pre: ENGL 1010 with a C- or better	3
	COMM 2200				3
HISTORY (6 hours) Choose two: HIST 2010, HIST 2020, HIST 2030					3
					3
HUMANITIES AND/OR FINE ARTS (9 hours) Choose 1: ENGL 2020, 2030, or HUM 2610. Choose 2 with different prefixes: ANTH 2210, ART 1030 or 1920, DANC 1000, HIST 1010, 1020, 1110, or 1120, MUS 1030, PHIL 1030, THEA 1030					3
					3
					3
MATHEMATICS (3 hours) Choose one: MATH 1010, 1530, 1630, 1710, 1720, 1730 , 1810, 1910	MATH 1730			MATH 1730 is required for major	3 of 4
NATURAL SCIENCES (8 hours) Choose two different subjects: ASTR 1030/1031, BIOL 1030/1031, BIOL 1110/1111, BIOL 2010/2011, BIOL 2020/2021, CHEM 1010/1011, CHEM 1030/1031, CHEM 1110/1111 , GEOL 1030/1031, GEOL 1040/1041, PGEO 1030, PHYS 1110, PHYS 2010/2011 , PHYS 2110/2111, PSCI 1030/1031, PSCI 1130/1131	CHEM 1110/1111			*see major courses for required sequences/pre-requisites; CHEM 1110/1111 required	4
	PHYS 2010/2011			*see major courses for required sequences/pre-requisites; PHYS 2010/2011 required Pre: MATH 1730 or MATH 1710 C(2.0) or better	4
SOCIAL/BEHAVIORAL SCIENCES (6 hours) Choose two different subjects: AAS 2100, ANTH 2010, ECON 2410, ECON 2420, EMC/JOUR/RIM 1020, GEOG 2000, GS 2010, HLTH 1530/1531, PS 1010 or 1005, PSY 1410, RS 2030, SOC 1010 or 2010, WGST 2100					3
					3
Hours Required					41

Major Courses (2.0 GPA required)	Course	Semester	Grade	Notes	Credit Hours
Engineering Fundamentals	ENGR 1100			Pre: MATH 1730	3
Introduction to Materials Science and Engineering	ENGR 2210			Pre: CHEM 1110/1111	3
Statics	ENGR 2110			Pre: ENGR 1100, MATH 1910; Co: PHYS 2010/2011	3
Dynamics	ENGR 2120			Pre: ENGR 2110, MATH 1920	3
Technical Project Management and Soft Skills	ENGR 3915			Pre: Junior/Senior	3
Engineering Safety	ENGR 3920				3
Engineering Economy	ENGR 3970			Pre: Junior/Senior	3
Computer Assisted Drafting/Design I	ET 2310				3
Industrial Orientation Internship	ET 2920			Permission of Dept.	1
Machine Tool Technology	ET 3210			Pre: ET 2310, ENGR 2210	3
Manufacturing Processes	ET 3260			Pre: ENGR 2210	3
Computer Assisted Drafting/Design II	ET 3360			Pre: ET 2310	3
Electrical Circuit Analysis I	ET 3601			Pre: ENGR 1100; Co: MATH 1910	3
Electrical Circuit Analysis II	ET 3602			Pre: ET 3601, MATH 1910	3

Major Requirements continued on next page

Major Requirements continued from previous page

Engineering Thermodynamics	ET 3810			Pre: ENGR 1100, PHYS 2010, MATH 1910	3
Strength of Materials	ET 3860			Pre: ENGR 2110	3
Advanced CADD	ET 4330			Spring only; Pre: ET 3360	3
Design of Machine Elements	ET 4340			Pre: ET 3860	3
Senior Problems in Engineering Technology	ET 4803			Pre: ET 3860, 4340, 4815; Permission of Dept	3
Heating, Ventilation, and Air-conditioning	ET 4815			Pre: ET 3810	3
Vibration	ET 4830			Fall only; Pre: ENGR 2120	3
Fluid Power	ET 4850			Pre: ENGR 1100, ET 3810	3
Robotics	ET 4860			Spring only; Pre: MATH 1910, CSCI 3 hrs	3
Hours Required					67

Supporting Courses					
Course	Semester	Grade	Notes		Credit Hours
CSCI 1170 – Computer Science I			MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score		4
ENGL 3620 – Professional Writing			Could substitute ENGL 3605 if not qualified to take ENGL 3620. Pre: ENGL lit and ENGL 1020 or 3605 with B		3
MATH 1730 – Algebra and Trigonometry			4 th credit from General Education; Need C(2.0)		1
MATH 1910 – Calculus I			Pre-req: MATH 1730 with a C(2.0) or higher, ACT MATH of 26, or Calculus Placement test with satisfactory score; must earn a grade of C(2.0) or higher		4
MATH 1920 – Calculus II			Need C: Pre: MATH 1910 with a C(2.0) or higher		4
CHEM 1110/1111 – General Chemistry I			Credits count in general education		0
PHYS 2010/2011 – Non-Calculus Based Physics I			Credits count in general education		0
Hours Required					16

Optional Minor – Mechanical Engineering Technology does NOT require a minor					
Course	Semester	Grade	Notes		Credit Hours
Hours Required					
Signed:					
	Minor Advisor				Date

1. Degrees require a minimum of 120 semester hours (12 of the last 18 at MTSU) with a 2.0 GPA, a minimum of 42 upper-division hours (30 at MTSU) with a 2.0 GPA, and a minimum of 60 senior college hours.
2. Learning Support courses count toward the 120-hour requirement and the overall GPA.

Signed:					
	Major Advisor				Date