BSET IN MECHANICAL ENGINEERING TECHNOLOGY DEGREE IN THREE ACADEMIC MAP

2018-2019 CATALOG YEAR

This is an unofficial simplified checklist effective fall 2017. Degree requirements may change. You may need elective courses to help reach a minimum of 123 Total Hours & 42 Advanced Hours. Check with an advisor.

Must earn at least a grade of "C" in each course above except for most University Core courses.

MECHANICAL ENGINEERING TECHNOLOGY

(Bachelor of Science in Engineering Technology (B.S.E.T) degree with a major in Mechanical Engineering Technology)

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University Core	**Major Requirements** (Grades with a C or better)
COMMUNICATION ▪ 1 Course (3 Hours) ▪ Grade of "C" or better is required AMERICAN HISTORY I ▪ 1 Course (3 Hours) AMERICAN HISTORY II ▪ 1 Course (3 Hours)	MECHANICAL ENERGY TECHNOLOGY ▪ ENGR 1030, Technical Systems (3 Hours) ▪ ENGR 1304, Engineering Graphics (3 Hours) ▪ ENGR 2301, Statics (3 Hours) ▪ ENGR 2302, Dynamics (3 Hours) ▪ ENGR 2332, Mechanics of Materials (4 Hours) ▪ ENGR 2405, Circuit Analysis (3 Hours) & ENGR 2415, Circuit Analysis Lab (1 Hour) ▪ ENGR 3450, Engineering Materials (4 Hours) ▪ ELET 3980, Digital Control of Industrial Processes (3 Hours)

FEDERAL GOVERNMENT/POLITICAL SCIENCE

- 1 Course (3 Hours)

STATE GOVERNMENT/POLITICAL SCIENCE

- 1 Course (3 Hours)

CREATIVE ARTS

- 1 Course (3 Hours)

LANGUAGE, PHILOSOPHY, & CULTURE

- 1 Course (3 Hours)

SOCIAL & BEHAVIORAL SCIENCES

- 1 Course (3 Hours)

Major Requirements (Grades of C or better)

TECHNICAL COMMUNIICATIONS

- TECM 2700, Technical Writing (3 Hours)

MATHEMATICS

- MATH 1710, Calculus I (4 Hours)
- MATH 1720, Calculus II (3 Hours)

SCIENCES

- PHYS 1710, Mechanics (3 Hours) & PHYS 1730, Mechanics Lab (1 Hour)
- PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)
- CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)
  OR
- CHEM 1415, Chemistry for Engineers (3 Hours) & CHEM 1435, Chemistry for Engineers Lab (1 Hour)
- MEET 3650, Design of Mechanical Components (3 Hours)
- MEET 3940, Fluid Mechanics Applications (3 Hours)
- MEET 3990, Applied Thermodynamics (3 Hours)
- MEET 4050, Mechanical Design (3 Hours)
- MEET 4350, Heat Transfer Applications (3 Hours)
- MEET 4360, Experimental Thermal Sciences (3 Hours)
- MEET 4780, Senior Design I (1 Hour)
- MEET 4790, Senior Design II (3 Hours)
- MFET 3110, Machining Principles and Processes (3 Hours)
- MFET 4190, Quality Assurance (3 Hours)
- MFET 4200, Engineering Cost Analysis (3 Hours)
- MFET 4210, CAD/CAM System Operations (3 Hours)

COMPUTER PROGRAMING

- CSCE 1030, Computer Science I (4 Hours)

TECHNICAL ELECTIVES

- Advanced level (3*** or 4 *** level) course chosen from appropriate elective options (3 Hours)
- Advanced level (3*** or 4*** level) course chosen from appropriate elective options (3 Hours)
- Advanced level (3*** or 4*** level) course chosen from appropriate elective options (3 Hours)
- Any level course chosen from appropriate elective options (3 Hours)

Electives must be chosen from the options below:
MFET 4220 NUET 3910 CNET 3410 NUET 3930
ELET 3220 NUET 4950 ELET 4720 NUET 4800
Completion of MFET 4220 for an advanced technical elective earns a Certificate in Manufacturing Engineering Technology.
Completion of NUET 3910, NUET 3930, NUET 4950, & NUET 4900 for advanced technical elective earns a Certificate in Nuclear Power Technology from the Nuclear Power Institute at Texas A & M University.

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Year 1 at UNT

FALL	Hrs.
PHYS 2220 (MATH 1720, PHYS 1710, 1730)	3
PHYS 2240 (MATH 1720, PHYS 1710, 1730)	1
ENGR 2301 (PHYS 1710, 1730)	3
CSCE 1030 (MATH 1650)	4
ENGR 1304	3
Total Hours	*14*

SPRING	Hrs.
ENGR 2302, Dynamics (ENGR 2301, MATH 1720)	3
ENGR 2332 (ENGR 2301)	4
ENGR 2405 (MATH 1720 co PHYS 2220, 2240)	3
ENGR 2415	1
TECM 2700	3
Total Hours	*14*

Year 2 at UNT

FALL	Hrs.
ENGR 3450 (PHYS 1710, CHEM reqt.)	4
MEET 3940 (ENGR 2302, MATH 1720)	3
MEET 3990 (ENGR 2332, CHEM reqt.)	3
MFET 3110 (MATH 1650)	3
Total Hours	*13*

SPRING	Hrs.
ELET 3980 (MATH 1650 or higher)	3
MEET 3650 (ENGR 2332)	3
MFET 4190 (MATH 1720)	3
MFET 4210 (see note 3)	3
Advanced Technical Elective	3
Total Hours	*15*

Year 3 at UNT

FALL	Hrs.
MEET 4050 (MEET 3650)	3
MEET 4350 (MEET 3940, 3990)	3
MEET 4780	1
MFET 4200 (MATH 1720)	3
Advanced Technical Elective	
Total Hours	*13*

SPRING	Hrs.
MEET 4790 (MEET 4780)	3
MEET 4360 (MEET 3940, 3990, 4350)	3
Advanced Technical Elective	3
Technical Elective	3
Total Hours	*12*

Required prerequisite (s) indicated in parentheses

Notes:

Note 1: MATH 1710 requires one of the following as prerequisite: completion of MATH 1650 with a grade of "C" or higher; or completion of MATH 1610 with a grade of "C" or higher; or Freshman Math Group Level 3; or approval authorized by score via mathematics testing; or earned credit for a math course at or above the MATH 1710 level.
Note 2: CHEM 1410 & 1430 requires MATH 1100, College Algebra, or placement into a higher level math course as prerequisite.
CHEM 1415 & 1435 requires MATH 1650, Pre-Calculus, or placement into a higher level math course as prerequisite.
Note 3: MFET 4210 requires MFET 3110, ENGR 1304, & completion of all MATH, PHYS, & CHEM requirements as prerequisite.
Note 4: MEET 4780 requires completion of MFET 4210 and completion of or concurrent enrollment in MEET 4050 and MEET 4350.

Must earn at least a grade of "C" & a minimum 2.5 GPA in Communications Core, TECM 2700, MATH 1710, PHYS 1710, PHYS 1730, ENGR 1304, & ENGR 2301 as foundations to enroll in advanced courses.

Credits Which Could Be Earned Prior to Enrollment at UNT –AP, IB, CLEP, DC, Transfer:	*Credits Which Should Be Earned Prior to Enrollment at UNT –AP, IB, CLEP, DC, Transfer:*
Communications Core ENGR 1030 (via ENGR 1201) HIST 2610 HIST 2620 PSCI 2305 PSCI 2306 Creative Arts Core Language Philosophy Culture Core Social Behavioral Sciences Core	MATH 1710 MATH 1720 PHYS 1710 & 1730 CHEM 1410 & 1430

This is an unofficial sample schedule. Requirements, prerequisites, etc. may change. Students should meet with an advisor each semester for individual scheduling, program decisions, etc. Engineering admissions requirements must be met & a degree audit must be created in order to progress in the program to a timely graduation.