

AS Mechanical Engineering to Bachelor of Science in Mechanical Engineering Guided Pathway Effective beginning with the 2021-2022 catalog



### **First Year - Collin College**

(Developmental coursework may be required.)

FIRST SEMESTER	SECOND SEMESTER	
<sup>c</sup> ENGL 1301 - Composition I	<sup>C</sup> ENGL 2311 - Tech and Bus Writing	
<sup>c</sup> GOVT 2306 - Texas Government	ENGR 1201 - Introduction to Engineering	
<sup>c</sup> Creative Arts (see list below)	<sup>C</sup> HIST 1302 - US History II	
<sup>C</sup> MATH 2413 - Calculus I	<sup>C</sup> MATH 2414 - Calculus II	
<sup>C</sup> HIST 1301 - US History I	<sup>C</sup> PHYS 2425 - University Physics I	
16 credit hours	16 credit hours	
SUMMER SEMESTER		
<sup>C</sup> ECON 2301 - Principles of Macroeconomics (pre-requisite required by UT Tyler)		

#### Second Year - Collin College

Apply to UT Tyler a full semester before you plan to transfer, providing a copy of this pathway document is recommended.

FIRST SEMESTER	SECOND SEMESTER
ENGR 2301 - Engineering Mechanics I	CHEM 1409 - Gen Chem for Eng Majors
<sup>c</sup> GOVT 2305 - Federal Government	ENGR 2332 - Mechanics of Materials
MATH 2415 - Calculus III	ENGR 2305 - Electrical Circuits I
<sup>C</sup> PHYS 2426 - University Physics II	MATH 2320 - Differential Equations
ENGR 1304 - Engineering Graphics	ENGR 2302 - Engineering Mechanics II
17 credit hours	16 credit hours

## Associate of Science in Mechanical Engineering

#### **Third Year – UT Tyler**

Students must fulfill **UT Tyler** admissions requirements which can be found on the UT Tyler website.

FIRST SEMESTER	SECOND SEMESTER
MENG 3210 - Exp Meas and Techniques	MATH 3351 - Prob. And Stat for Eng. And Scientists
MENG 3303 - Dynamics of Machinery	MENG 3211 - Thermal-Fluids Laboratory
MENG 3310 - Fluid Mechanics	MENG 3309 - Mechanical Systems Design
MENG 3319 - Mat Sci and Manufacturing	MENG 3316 - Heat Transfer
MENG 3401 - Thermodynamics	<sup>C</sup> SPCM 1315 - Fundamentals of Speech Communication
EENG 2301 - Programming Languages for Design	Technical Elective
18 credit hours	17 credit hours

## Fourth Year – UT Tyler

FIRST SEMESTER	SECOND SEMESTER
MENG 4215 - Senior Capstone Design I	MENG 4216 - Senior Capstone Design II
MENG 4312 - System Dynamics and Control	MENG 4326 - Finite Element Analysis
Technical Elective	Technical Elective
Technical Elective	Technical Elective
MATH 3203 - Matrix Methods in Engineering	<sup>C</sup> PHIL 2306 - Introduction to Ethics
13 credit hours	14 credit hours

# **Bachelor of Science in Mechanical Engineering**

Contact your advisor at **UT Tyler** for information about applying for your Bachelor's degree.

# **Collin College Options**

<u>Creative Arts</u> - choose one from: **ARTS** 1301, 1303, 1304, 1313, **DANC** 2303, **DRAM** 1310, 2361, 2362, 2366, **MUSI** 1306, 1307, 1310