

# 2018 FALL - 2019 SPRING - CATALOG

127 hrs

## Freshman

## Sophomore

## Junior

## Senior

Fall

Spring

Fall

Spring

Fall

Spring

Fall

Spring

MATH 1650  
Pre-Calculus  
5 hrs

MATH 1710  
Calculus I  
4 hrs

MATH 1720  
Calculus II  
3 hrs

PHYS 2220/2240  
Electr. & Mag.  
(Physics II)  
4 hrs

Co-Req

ENGR 2405  
or  
EENG 2610  
Circuits  
3 hrs

MEEN 4150  
Design I  
3 hrs

MEEN 4250  
Design II  
3 hrs

MATH 1100  
Algebra  
3 hrs

CHEM 1415/1435  
Chemistry  
Or  
CHEM 1410/1430  
Chemistry  
4 hrs

PHYS 1710/1730  
Mechanics  
(Physics I)  
4 hrs

MATH 2700  
Lin. Alg.  
3 hrs

MATH 2730  
Calculus III  
3 hrs

MEEN 3110  
Thermo II  
3 hrs

MEEN 3230  
Sys., Dyn.,  
Con.  
3 hrs

MEEN  
Tech Elective  
#1

MEEN  
Tech Elective  
#2

D grades are no longer accepted for Prerequisite courses

Students must have MEE Faculty approval for courses taken outside UNT

Co-Req

MEEN 2240  
Programing  
3 hrs

MATH 3410  
Diff. Eqn.  
3 hrs

MEEN 2110  
Data Analysis  
2 hrs

MEEN 3250  
Analytical Meth.  
3 hrs

MEEN 3240  
MEE Lab I  
2 hrs

MEEN 3210  
Heat Transfer  
3 hrs

MEEN Energy Elective #1

MEEN Energy Elective #2

MEEN 2210  
Thermo I  
3 hrs

MEEN 2301  
Statics  
3 hrs

MEEN 2210  
Thermo I  
3 hrs

MEEN 2302  
Dynamics  
3 hrs

MEEN 3120  
Fluids  
3 hrs

MEEN 3242  
MEE Lab II  
1 hrs

Co-Req

MEEN 3130  
Machine Elem.  
3 hrs

Co-Req

MEEN 1000\*  
Discover MEE  
3 hrs

ENGR 1304  
Eng. Graphics  
3 hrs

MEEN 2332  
Mech of Matl.  
3 hrs

MTSE 3000/3003  
Eng. Matl. Lab  
4 hrs

MEEN 3100  
Manufacturing Processes  
3 hrs

### UNT CORE

US HIST  
ENGL COMP

TECM 2700  
VIS. ART

POLITICAL SCI

US HIST

SOCIAL & BEHAVIORAL SCIENCE

POLITICAL SCI  
HUMANITY

## 2018 Fall to 2019 Spring

Course Number		TYPE	Title	Pre-Requisites				Co-Requisites	
MEEN	3125	ENERGY	Thermal Engineering Projects	MEEN 2210				MEEN 3110	MEEN 3120
MEEN	4010	ENERGY	Thermal Energy Storage (TES)	MEEN 3120	MEEN 3210				
MEEN	4110	ENERGY	Alternative Energy Sources	MEEN 3110	MEEN 3120	MEEN 3210			
MEEN	4112	ENERGY	Fundamentals of Nuclear Engineering	MEEN 3110	MEEN 3120	MEEN 3210			
MEEN	4120	TECH	Aerospace Fundamentals	MATH 2700	MEEN 3120	MEEN 3230	MEEN 2240		
MEEN	4130	TECH	Failure of Deformable Bodies	MEEN 2332	MTSE 3000				
MEEN	4140	TECH	Finite Element Analysis	MATH 3410	MEEN 2332	MEEN 2302			
MEEN	4151	TECH	Manufacturing of Renewable Biocomposites for Lightweight Energy Efficient Structure	MEEN 2301					
MEEN	4152	TECH	Mechanics of Composites and Foams for Lightweight Energy Efficient Structures	MEEN 2332	MEEN 2240				
MEEN	4160	TECH	Mechanical Vibrations	MATH 1720	MEEN 2302				
MEEN	4190	TECH	Quality Assurance	MATH 1720					
MEEN	4300	ENERGY	Intermediate Thermodynamics	MEEN 3110	MEEN 3120	MEEN 3210			
MEEN	4310	ENERGY	Intermediate Heat Transfer	MEEN 3110	MEEN 3120	MEEN 3210			
MEEN	4315	ENERGY	Nanoscale Energy Transport Process	MEEN 3110	MEEN 3120	MEEN 3210			
MEEN	4320	ENERGY	Mechanical Systems for Buildings	MEEN 3120	MEEN 3210				
MEEN	4330	ENERGY	Introduction to Combustion Science and Engineering	MEEN 3110					
MEEN	4332	ENERGY	Fundamentals of Air Pollution Engineering	MEEN 3110					
MEEN	4335	ENERGY	Computational Simulation of Building Energy Systems	MEEN 3120	MEEN 3210				
MEEN	4340	ENERGY	Energy Efficiencies and Green Building Design for Commercial Buildings	MEEN 3120	MEEN 3210				
MEEN	4350	ENERGY	Energy Efficiencies and Green Building for Residential Buildings	MEEN 3120	MEEN 3210				
MEEN	4410	ENERGY	Energy Harvesting System Design	MEEN 3230	ENGR 2405 or EENG 2610				
MEEN	4415	TECH	Smart Materials and Structures	MEEN 3230	ENGR 2405 or EENG 2610				
MEEN	4488	TECH	Introduction to Microfluidics	MEEN 3120					
MEEN	4510	TECH	Electronic Manufacturing Technologies	MEEN 3100					
MEEN	4800	TECH	Topics in Mechanical and Energy Engineering	Consent of instructor					
MEEN	4810	ENERGY	Topics in Mechanical and Energy Engineering	Consent of instructor					
MEEN	4890		Directed Study in Mechanical and Energy Engineering	MEEN 2210					
MEEN	4900		Special Problems in Mechanical and Energy Engineering	Consent of instructor					
MEEN	4910		Special Problems in Mechanical and Energy Engineering	Consent of instructor					
MEEN	4920		Cooperative Education in Mechanical and Energy Engineering	Consent of Department					
MEEN	4930	TECH	Undergraduate Research	Consent of Department; enrollment in the Grad Track program					