

# Dual Degree BS, MATH + BS, Mechanical and Energy Engineering Effective for the 2024 - 2025 Catalog



#### **FIRST YEAR**

SEMESTER 1	CREDIT HOURS	SEMESTER 2	CREDIT HOURS
MATH 2014 Calculus I (020)	4	MATH 2024 Calculus II	4
CSCI 1203 Computing Skills for a Digital World 3		MATH 2053 Women and Minorities in Engineering, Math, and	
		Science	3
CHEM 1113 & 1111 General Chemistry I & Lab	(030) 4	MATH 3073 Matrix Methods	3
ENGL 1013 Composition I (010)	3	Creative Arts (050)	3
UNIV 1231 Learning Frameworks (090)	1	Multicultural Woman's Studies CAO (090)	3
Wellness/Mathematics CAO (090)	2		
Total Semester Hours: 17		Total Semester Hours: 16	
SUMMER			
HIST 1013 History of the United States (060)	3	POLS 2013 U.S. National Government (070)	3

#### **SECOND YEAR**

SEMESTER 3	CREDIT HOURS	SEMESTER 4	CREDIT HOURS	
MATH 3104 Calculus III	4	MATH 3123 Differential Equations	3	
MATH 3053 Abstract Algebra	3	MATH 3083 Elementary Number Theory	3	
PHYS 2153 General Physics I + 2151 PHYS Lab	030) 4	PHYS 2163 General Physics II + PHYS 2161 Lab	4	
*ENGR 1304 Engineering Graphics	3	MATH 3013 Discrete Mathematics	3	
*MEEN 1000 Discover Mechanical and Energy	3	*ENGR 2301 Statics	3	
Total Semester Hours: 17		Total Semester Hours: 16		
SUMMER				
HIST 1023 History of the US (060)	3	POLS 2013 US National Government (070)	3	

### THIRD YEAR

SEMESTER 5	CREDIT HOURS	SEMESTER 6	CREDIT HOURS	
MATH 3063 Linear Algebra	3	MATH 4873 Real Analysis	3	
MATH 4013 Probability and Statistics	3	MATH Elective	3	
*TECM 2700 Technical Writing (010)	3	*MEEN 2110 Engineering Data Analysis	3	
*ENGR 2302 Dynamics	3	*MEEN 2210 Thermodynamics I	3	
*ENGR 2332 Mechanics of Materials	3	*MEEN 2240 Programming for Engineers	3	
Total Semester Hours: 15		Total Semester Hours: 15		
SUMMER				
Social/Behavioral Science Course (080)	3	Language, Philosophy, and Culture (040)	3	

#### **FOURTH YEAR**

SEMESTER 7	CREDIT HOURS	SEMESTER 8	CREDIT HOURS
*EENG 2610 Circuit Analysis	3	*MEEN 3130 Machine Elements	3
*ENGR 3450 Engineering Materials	4	*MEEN 3210 Heat Transfer	3
*MEEN 3110 Thermodynamics II	3	*MEEN 3230 Dynamics and Controls	3
*MEEN 3120 Fluid Mechanics	3	*MEEN 3242 Laboratory II	1
*MEEN 3240 Laboratory I	2	*MEEN 3250 Analytical Methods	3
		CSCI 3013 Applied Computational Thinking	3
Total Semester Hours: 15	_	Total Semester Hours: 16	

#### FIFTH YEAR

SEMESTER 7	CREDIT HOURS	SEMESTER 8	CREDIT HOURS
*MEEN 3100 Manufacturing Processes	3	MEEN 4250 Senior Design II	3
*MEEN 4150 Senior Design I	3	*MEEN Energy Elective	3
*MEEN Energy Elective	3	*MEEN Technical Elective	3
*MEEN Technical Elective	3	MATH Elective	3
MATH Elective	3		



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Total Semester Hours: 15 Total Semester Hours: 12

#### **SPECIFIC PROGRAM NOTES:**

- Courses in BLACK are taken at TWU. Courses in \*GREEN are taken at UNT. Courses must be taken in a particular prerequisite order.
- ENGL, TECM, MATH, CHEM, PHYS, ZOOL, BMEN, and Track Elective courses require a minimum grade of "C" for completion and/or
  prerequisite.
- UNT students should check their degree audit at mydegreeaudit.unt.edu each term.
- UNT students should meet with their advisor each term to discuss individual scheduling, program decisions, etc.
- This is not an official degree plan. Consult with an academic advisor or transfer center for academic planning; degree plans and pathways are subject to change in later catalogs. NOTE: Developmental and/or pre-requisite coursework may be required.
- Students may take an optional course to meet this core requirement. These courses may be taken at their community college. Contact an Academic advisor at your institution.
- Subject to course availability and department approval. Consult with an academic advisor for academic planning.
- Texas Common Core Curriculum Code under the Texas Higher Education Coordinating Board.