TWU Mathematics – UNT Materials Science and Engineering

2024-2025 Catalog: Sample Five-Year Schedule

YEAR ONE

Fall Semester	Course Title	Credit Hours		Spring Semester	Course Title	Credit Hours		Summer Semester	Course Title	Credit Hours
MATH 2014	Calculus I	4		MATH 2024	Calculus II	4		HIST 1013	History of the United States	3
CSCI 1203 or 2003	Computing Skills for a Digital World or Software Systems Design and Tools	3		MATH 2053	Women and Minorities in Engineering, Math, and Science	3		POLS 2013	U.S. National Government	3
CHEM 1113 & 1111	General Chemistry I & Lab	4		MATH 3073	Matrix Methods	3		Total Hours		6
ENGL 1013	Composition I	3		CHEM 1123	General Chemistry II	3				
UNIV 1231	Learning Frameworks	1		University Core	Multicultural Woman's Studies CAO	3				
University Core	Wellness/Mathematics CAO	2		Total Hours		15				
Total Hours		15								

YEAR TWO

MATH 3104	Calculus III	4		MATH 3123	Differential Equations	3		HIST 1023	History of the United States	3
MATH 3053	Abstract Algebra	3		MATH 3083	Elementary Number Theory	3		POLS 2023	Texas Government	3
PHYS 2153 & 2151	General Physics I and Lab	4		PHYS 2163 & 2161	General Physics II and Lab	4		Total Hours		6
TECM 2700	Technical Writing	3		MATH 3013	Discrete Mathematics	3				
MTSE 1100	Discover How and Why Materials Matter	3		MATH Elective	MATH Elective	3				
Total Hours		17		Total Hours		16				

YEAR THREE

MATH 3063	Linear Algebra	3		MATH 4873	Real Analysis	3		University Core	Creative Arts	3
MATH 4013	Probability and Statistics	3		MATH Elective	MATH Elective	3		Total Hours		3
MATH Elective	Math Elective	3		CSCI 3013	Applied Computational Thinking	3				
ENGR 2301	Statics	3		MTSE 3001	Fundamentals II	3				
MTSE 3000	Fundamentals I	3		MTSE 3110	Quantum Materials	3				
Total Hours		15		Total Hours		15				

YEAR FOUR

MTSE 3010	Bonding and Structure	3		MTSE 3050	Mechanical Properties	3				
MTSE 3020	Microstructure and Characterization	3		MTSE 3060	Phase Transformations	3				
MTSE 3030	Thermodynamics and Phase Diagrams	3		MTSE 3070	Elect., Optical, Magnetic Properties	3				
MTSE 3040	Transport Phenomena	3		MTSE 3080	Materials Processing	3				
MTSE 3090	Laboratory I	1		MTSE 3100	Laboratory II	1				
University Core	Social and Behavioral Sciences	3		University Core	Language, Philosophy and Culture	3				
Total Hours		16		Total Hours		16				

YEAR FIVE

MTSE 4010	Physical Metallurgy Principles	3		MTSE 4050	Polymer Science and Engineering	3				
MTSE 4030	Ceramic Science and Engineering	3		MTSE 4100	Senior Design II	3				
MTSE 4060	Selection and Performance	3		MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070	3				
MTSE 4090	Senior Design I	3		MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070	3				
Total Hours		12		Total Hours		12				

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, ENGR, and MTSE courses require minimum grade of "C" for completion and/or prerequisite.
This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change.
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.