UNT UNIVERSITY OF NORTH TEXAS

Dual Degree
BS, MATH + BS, Materials Science & Engineering
Effective for the 2024 - 2025 Catalog

TEXAS WOMAN'S UNIVERSITY

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	CHEM 1123 General Chemistry II	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
***TECM 2700 Technical Writing (010)**	**3**	MATH 3013 Discrete Mathematics	3
MTSE 1100 Discover How and Why Materials Matter	**3**	MATH Elective	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
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 Semester Hours: 15		**Total Semester Hours: 15**	
SUMMER			
Creative Arts (050)	3		

Fourth Year

SEMESTER 7	CREDIT HOURS	SEMESTER 8	CREDIT HOURS
***MTSE 3010 Bonding and Structure**	**3**	***MTSE 3050 Mechanical Properties**	**3**
***MTSE 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**
Social/Behavioral Science Course (080)	3	Language, Philosophy, and Culture (040)	3
Total Semester Hours: 16		**Total Semester Hours: 16**	

Fifth Year

SEMESTER 7	CREDIT HOURS	SEMESTER 8	CREDIT HOURS
***MTSE 4010Physical 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 4020 or MTSE 4040 or MTSE 4070**	**3**
***MTSE 4090 Senior Design I**	**3**	**MTSE 4020 or MTSE 4040 or MTSE 4070**	**3**
Total Semester Hours: 12		**Total Semester Hours: 12**	

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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.