

# Mechanical Engineering Technology – Calculus I

2023-2024 Catalog: Sample Four-Year Schedule

Year One	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	ENGR 1030	Technological Systems	3	F., Sp.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	ENGR 1304	Engineering Graphics	3	F., Sp.	University Core	University Core – American History I	3	F., Sp., Su.
	Comm. Core	University Core – Communication	3	F., Sp., Su.	University Core	University Core – Federal Government	3	F., Sp., Su.
	Total Hours		17		Total Hours		16	

Year Two	PHYS 2220	Electricity and Magnetism <i>Pre-reqs: MATH 1720, PHYS 1710, 1730</i>	3	F., Sp., Su.	ENGR 2302	Dynamics <i>Pre-reqs: ENGR 2301, MATH 1720</i>	3	F., Sp., Su.
	PHYS 2240	Electricity and Magnetism Lab <i>Co-req/pre-req: PHYS 2220</i>	1	F., Sp., Su.	ENGR 2332	Mechanics of Materials <i>Pre-reqs: ENGR 2301</i>	3	F., Sp., Su.
	ENGR 2301	Statics <i>Pre-reqs: PHYS 1710, 1730</i>	3	F., Sp., Su.	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720</i> <i>Co/Pre-req: PHYS 2220/2240</i>	3	F., Sp., Su.
	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	EENG 2611	Circuit Analysis Lab <i>Co/Pre-req: EENG 2610</i>	1	F., Sp., Su.
	University Core	University Core – American History II	3	F., Sp., Su.	University Core	University Core – State Government	3	F., Sp., Su.
	Total Hours		14		Total Hours		14	

Year Three	ENGR 3450	Engineering Materials <i>Pre-reqs: ENGR 2332, CHEM 1410/1430 and PHYS 1710/1730</i>	4	F., Sp.	MEET 3980	Digital Controls of Industrial Processes <i>Pre-reqs: EENG 2610/2611 and CSCE 1030</i>	3	Sp.
	MEET 3940	Fluid Mechanics <i>Pre-req: ENGR 2302, MATH 1720</i>	3	F., Sp., Su.	MEET 3650	Design of Mechanical Components <i>Pre-req: ENGR 2332</i>	3	Sp.
	MEET 3990	Applied Thermodynamics <i>Pre-req: ENGR 2332, CHEM 1410/1430</i>	3	F., Sp., Su.	MFET 4190	Quality Assurance <i>Pre-req: MATH 1720</i>	3	Sp.
	MFET 3110	Machining Principles and Processes <i>Pre-req: MATH 1650</i>	3	F., Sp.	MFET 4210	CAD/CAM System Operation <i>Pre-req: MFET 3110, ENGR 1304, and MATH/PHYS/CHEM requirements</i>	3	F., Sp.
	University Core	University Core – Creative Arts	3	F., Sp., Su.	MEET 3550	Geometric Dimens. and Tolerancing <i>Pre-reqs: MFET 3110, ENGR 1304</i>	3	Sp.
	Total Hours		16		Total Hours		15	

Year Four	MEET 4050	Mechanical Design <i>Pre-req: MEET 3650</i>	3	F.	MEET 4790	Senior Design II <i>Pre-req: MEET 4780</i>	3	Sp.
	MEET 4350	Heat Transfer Applications <i>Pre-req: MEET 3940, 3990</i>	3	F.	MEET 4360	Experimental Thermal Sciences <i>Pre-req: MEET 3940, 3990, 4350</i>	3	Sp.
	MEET 4780	Senior Design I <i>Pre-reqs: ENGR 3450 and MEET 3980</i> <i>Co/Pre-req: MFET 4210, MEET 4050, 4350</i>	1	F.	Advanced Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	MFET 4200	Engineering Cost Analysis <i>Pre-req: MATH 1720</i>	3	F.	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	Advanced Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	University Core	University Core – Social and Behavioral Sciences	3	F., Sp., Su.
	University Core	University Core – Language, Philosophy and Culture	3	F., Sp., Su.	Total Hours		15	
	Total Hours		16					

Courses in **GREEN** are taken at UNT and require a particular prerequisite order.

Courses in **BLACK** can be fulfilled by AP, IB, CLEP, and/or Texas Community College Dual Credit or Transfer Credit and require a particular prerequisite order.

Courses in **BLUE** can be fulfilled by AP, IB, CLEP, and/or Texas Community College Dual Credit or Transfer Credit and can be completed in any term prior to graduation.

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CSCE, MEET, and MEET courses require minimum grade of "C" for completion and/or prerequisite. This is an unofficial sample schedule.

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.

# Advanced Placement (AP), International Baccalaureate (IB), Credit by Exam (CLEP), Texas Community College Dual Credit, Texas Community College Transfer Credit

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## **COMMUNICATION**

AP English Lang. And Comp. Score of 3  
IB English A: Lang. and Lit. Score of 5  
Community College: ENGL 1301

## **TECHNICAL WRITING**

Community College ENGL 231 I: TECM 2700

## **AMERICAN HISTORY I**

AP U.S. History score of 3  
CLEP History of United States I  
Community College: HIST 1301

## **AMERICAN HISTORY II**

AP U.S. History score of 3  
CLEP History of United States II  
Community College: HIST 1302

## **FEDERAL GOVT/POLI SCIENCE**

AP U.S. Government score of 3  
CLEP American Government  
Community College: GOVT 2305

## **STATE GOVT/POLI SCIENCE**

Community College: GOVT 2306

## **CREATIVE ARTS**

AP Art History score of 3  
IB Dance score of 4\*  
Community College: ARTS 1301  
Community College: ARTS 1304  
Community College: MUSI 1306  
Community College: DRAM 1310

## **LANGUAGE, PHILOSOPHY, AND CULTURE**

AP English Literature and Comp. score of 3  
AP World History score of 3  
IB History score of 4\*  
IB Philosophy score of 5  
IB English Language A: Lit. Score of 5  
Community College: ENGL 2332  
Community College: ENGL 2333  
Community College: ENGL 2341  
Community College: HIST 2321  
Community College: HIST 2322  
Community College: PHIL 1301  
Community College: PHIL 1304  
Community College: PHIL 2303  
Community College: PHIL 2306

## **SOCIAL AND BEHAVIORAL SCIENCES**

AP Macroeconomics score of 3  
AP Microeconomics score of 3  
AP Psychology score of 3  
IB Economics score of 4\*  
IB Geography score of 4\*  
IB Psychology score of 4\*  
CLEP Macroeconomics  
CLEP Microeconomics  
CLEP Human Growth and Development  
CLEP Introductory Psychology  
CLEP Introductory Sociology

## **SOCIAL AND BEHAVIORAL SCIENCES (Continued)**

Community College: ANTH 2346  
Community College: ANTH 2351  
Community College: SPCH 1318  
Community College: ECON 2301  
Community College: ECON 2302  
Community College: GEOG 1303  
Community College: TECA 1354  
Community College: COMM 1307  
Community College: PSYC 2301  
Community College: PSYC 2302  
Community College: SOCI 1301

## **CHEMISTRY**

AP Chemistry score of 4: CHEM 1410, 1430  
AP Chemistry score of 5: CHEM 1410, 1430, and 1420, 1440  
IB Chemistry: CHEM 1410, 1430, and 1420, 1440  
CLEP General Chemistry: CHEM 1410, 1420  
Community College CHEM 1111: CHEM 1430  
Community College CHEM 1311: CHEM 1410  
Community College CHEM 1411: CHEM 1410, 1430

## **PHYSICS**

AP Physics C (Mechanics) score of 4: PHYS 1710, 1730  
AP PHYS Physics C (Electricity and Magnetism) score of 4: PHYS 2220, 2240  
Community College PHYS 2125: PHYS 1730  
Community College PHYS 2126: PHYS 2240  
Community College PHYS 2325: PHYS 1710  
Community College PHYS 2326: PHYS 2220  
Community College PHYS 2425: PHYS 1710, 1730  
Community College PHYS 2426: PHYS 2220, 2240

## **MATHEMATICS**

AP Calculus AB score of 3: MATH 1710  
AP Calculus BC score of 3: MATH 1710, 1720  
AP Calculus AB sub score of BC Exam score 3: MATH 1710  
IB Mathematics – Calculus: MATH 1710  
CLEP College Algebra: MATH 1100  
CLEP Pre-calculus: MATH 1650  
CLEP Calculus: MATH 1710  
Community College MATH 1314: MATH 1100  
Community College MATH 1414: MATH 1100  
Community College MATH 2312: MATH 1650  
Community College MATH 2412: MATH 1650  
Community College MATH 2313: MATH 1710  
Community College MATH 2314: MATH 1720  
Community College MATH 2413: MATH 1710  
Community College MATH 2414: MATH 1720

## **ENGINEERING**

Community College ENGR 1204: ENGR 1304  
Community College ENGR 1304: ENGR 1304  
Community College ENGR 2105: EENG 2611  
Community College ENGR 2301: ENGR 2301  
Community College ENGR 2302: ENGR 2302  
Community College ENGR 2332: ENGR 2332  
Community College ENGR 2305: EENG 2610  
Community College ENGR 2405: EENG 2610, 2611

## **COMPUTING/PROGRAMMING**

AP Computer Science A score of 4: CSCE 1030  
IB Computer Science: CSCE 1030  
Community College COSC 1336: CSCE 1030  
Community College COSC 1436: CSCE 1030