



# Undergraduate Academic Guidebook

## 2023-2024



## Engineering Admissions

Students are admitted as a pre-major and can be changed to a full-major once criteria below is fulfilled.

### First Time in College/Freshman Applicants

- Top 25% of high school graduating class
  - MATH SAT score of 590 or better and a total SAT score of 1140 or better
  - MATH ACT score of 23 or better and a composite ACT score of 23 or better
- Top 50% of high school graduating class or unranked (including GED and homeschooled)
  - MATH SAT score of 620 or better and a total SAT score of 1170 or better
  - MATH ACT score of 24 or better and a composite ACT score of 24 or better
- 51% or lower high school graduating class
  - MATH SAT score of 650 or better and a total SAT score of 1250 or better
  - MATH ACT score of 26 or better and a composite ACT score of 26 or better
- Completion of Pre-Calculus **or higher with a minimum grade of "C" or placement into Calculus I**

Construction Engineering Technology majors or Mechanical Engineering Technology majors can be admitted as full-major with a minimum MATH SAT score of 570 or a minimum MATH ACT score of 22 regardless of rank.

Construction Management majors can be admitted as full-major regardless of rank, scores, etc.

### Transfer, 2<sup>nd</sup> Bachelor's, Major Changer Applicants

- Minimum 2.0 GPA
- Completion of Pre-Calculus or higher with a minimum grade of "C" or placement into Calculus I

Construction Management majors can be admitted as full-major regardless of GPA or math eligibility

### Continuing or Returning Engineering Students

- Minimum 2.0 GPA
- Completion of Pre-Calculus or higher with a minimum grade of "C" or placement into Calculus I

Construction Management majors can be admitted as full-major regardless of GPA or math eligibility

## Mathematics Readiness

Engineering majors require enrollment in a high-level math course in the 1<sup>st</sup> semester to attempt a timely graduation. Entry into math courses is dependent on TSI completion and either (1) entry via a placement test, or (2) completion of college level math prerequisite courses. College level math courses earned via AP, IB, CLEP, DC, and/or transfer is listed on pages 58.

### Prerequisite Sequence for Beginning Math Courses:

MATH 340 (Pre-Beginning Algebra – if TSI Required) or MATH 350 (Beginning Algebra - If TSI required) → MATH 1100 (College Algebra) → MATH 1650 (Pre-Calculus) → MATH 1710 (Calculus I)

### Pre-Placement for First Time in College/Freshmen:

TSI math complete students (without earned college level math credit) are assigned a Math Group Level based on SAT/ACT and high school rank:

- Math Level 1 or Blank Math Level: MATH 1100 (College Algebra)
- Math Level 2: MATH 1650 (Pre-Calculus)

### Placement Testing Options:

TSI math complete students can test to attempt clearance into a higher math course. Options are:

- Canvas Math Placement
  - Free online test
  - Must score a minimum of 50 to enter MATH 1650 (Pre-Calculus)
  - Must score a minimum of 70 to place into MATH 1710 (Calculus I)
- ALEKS
  - Online test which requires a small fee and completion of a 6 weeklong tutorial.
  - Must score a minimum of 50 to enter MATH 1650 (Pre-Calculus)
  - Must score a minimum of 70 to place into MATH 1710 (Calculus I)

Refer to [math.unt.edu/academics/mathematics-placement](http://math.unt.edu/academics/mathematics-placement) to access tests and review test rules/guidelines

## Course Types

UNT offers many course types and/or formats. Below are common ones:

- **Prerequisite or “Prereq”**
  - Course that must be completed to move onto another course in a sequence. Prereqs are never waived or ignored.
- **Corequisite or “Coreq”**
  - Course that must be taken in the same semester as another course. Coreqs are never waived or ignored.
- **Recitation or “Rec”**
  - Extra required meeting time to cover homework, take tests, answer questions, etc.
- **Laboratory or “Lab”**
  - Required time that is an application of the information that you learn in class.
- **Advanced course**
  - High level courses as indicated by a 3\*\*\* or 4\*\*\* numbering. Normally requires completion of multiple prereqs and/or coreqs before you can take the course.
- **Restricted**
  - Course or a section time of a course that limited to certain students
  - Examples include restrictions for TAMS, Honors, Out of State, Dual Credit.

## Course Locations

UNT offers courses via various delivery types/locations. Below are common ones:

- **UNT Internet Course**
  - Instruction, assignments, and work is all online.
- **Collin Higher Education Center (CHEC)**
  - Campus located in McKinney, TX.
  - Limited course options are available at this campus.
- **Discovery Park (NTDP)**
  - Campus located in north Denton, TX
  - Majority of all engineering courses are taught at this campus.
- **Frisco Landing (FRLD)**
  - Campus located in Frisco, TX.
  - Limited core, math, writing, and computing course options are available at this campus.
- **Inspire Park (FRIP):**
  - Campus located in Frisco, TX.
  - Limited science options are available at this campus.

## Course Semester Offerings

### Fall semester/session offerings:

- Fall Regular: August - December
- Fall 8 Week 1: August - October
- Fall 8 Week 2: October - December

### Spring semester/session offerings:

- Spring 3 Week (winter): December - January
- Spring Regular: January - May
- Spring 8 Week 1: January - March
- Spring 8 Week 2: March - May

### Summer semester/session offerings:

- Summer 3 Week: May
- Summer 5 Week 1: May - June
- Summer 10 Week: May - July
- Summer 8 Week: June - July
- Summer 5 Week 2: June – July

*Not every course is offered every semester or session*

## Credit Hours

Number of units assigned to each course. Also referred to as “credits” or “hours”. It indicates approximately how many hours per week you’ll be in class and how many hours per week that you will need to study for that course. It’s also used in the calculation of your GPA.

### How many hours do I earn for each course?

Depends on the course. Usually 3 – 4 hours but courses can range from 1 – 5 hours.

### How many credits is full-time?

12 hours (approximately 4 courses).

### How many hours can I take each semester?

19 hours in the fall/spring and 18 hours in the summer. This applies to credits enrolled at UNT and another institution (concurrent enrollment). You may receive overload approval to take more hours if you meet certain GPA criteria.

### Do I have to be a full-time student?

No, not unless you are an international student, athlete, scholarship recipient or receiving maximum financial aid. To attempt a timely graduation, you should plan to take 15-16 hours unless you work. Your number of work hours will impact the number of credit hours you should attempt each semester. Please consult with your advisor to determine the proper balance of work and school.

## Classification

Your classification is based on the number of earned credit hours after semester grade posting; not the number of years you have been in school. Classification dictates your registration appointment time each semester and may impact your eligibility for scholarships, financial aid, internships, etc.

- *Freshman:* 0 – 29 hours
- *Sophomore:* 30 – 59 hours
- *Junior:* 60 – 89 hours
- *Senior:* 90+ hours

## Grade Point Average (GPA)

Grades have a point value and courses are worth an amount of credit hours. GPA is calculated by dividing grade points earned by the number of attempted hours. Grades of “CR” (AP, CLEP, IB credits) and “W” don’t count as attempted hours in GPA calculations. Grades of “F” are attempted hours and count heavily against your GPA.

### How do grades convert to grade points?

- A = 4 points x # of credit hours course is worth
- B = 3 points x # of credit hours course is worth
- C = 2 points x # of credit hours course is worth
- D = 1 points x # of credit hours course is worth
- F = 0 points x # of credit hours course is worth

### How to calculate your GPA:

- Determine grade points for each course using the conversion above
- Total your number of grade points and your number of attempted hours
- Divide total grade points by total attempted hours
- Number that results = your GPA

### Different types of GPAs:

- Semester or Term GPA: the GPA you earned for the semester/term just enrolled.
- UNT GPA: the cumulative GPA you earn in all UNT courses. A minimum 2.0 GPA is required.
- Overall GPA: GPA you earn in all courses (UNT and transfer). A minimum 2.0 GPA is required.
- Major GPA: the GPA you earn in courses in your major. A minimum 2.0 GPA is required

You can access a GPA calculator at [advising.unt.edu/about-your-gpa/calculate-your-gpa](http://advising.unt.edu/about-your-gpa/calculate-your-gpa)

### Grade Point Average (GPA): Academic Status

Your cumulative UNT grades are used to calculate academic status. Grades earned in transfer are considered in calculation of Graduation with Honors and fulfillment of degree requirements but are not considered with determination of academic status.

#### Academic Good Standing:

Standing if you earn at least a cumulative 2.0 UNT GPA. A 1.8 UNT GPA is acceptable during your 1<sup>st</sup> semester at UNT but it must be increased to at least a 2.0 after your 1<sup>st</sup> semester.

#### Academic Alert:

Standing if you are a freshman and your UNT GPA falls below 1.8 during the 1<sup>st</sup> semester or falls below 2.0 during the 2<sup>nd</sup> semester. You can only be placed on alert once. You will be required to participate in academic coaching sessions via the Learning Center during your alert semester. You must raise your UNT GPA to 2.0 or higher during your alert semester or you will be placed on probation.

#### Academic Probation:

Standing if you are not eligible for alert and your UNT GPA falls below 1.8 during the 1<sup>st</sup> semester or falls below 2.0 during any following semester. You must raise your UNT GPA to 2.0 to return to good standing or earn a semester GPA of at least 2.25 to remain on probation. You will be required to participate in academic coaching session via the Learning Center during your probation semester.

#### Academic Suspension:

Standing if you fail to raise your UNT GPA to a 2.0 or earn a 2.25 semester GPA while on probation. You are prohibited from attending UNT for 1 long semester for a 1<sup>st</sup> suspension or 2 long semesters for a 2<sup>nd</sup> suspension. You must petition for approval to re-enter the College of Engineering after completing the suspension period. You will be dismissed permanently from the College of Engineering if you are suspended a 3<sup>rd</sup> time.

### Grade Point Average (GPA): Honors

#### Semester Honors:

Semester honors is based on your fall or spring semester GPA and is documented on your UNT transcript. You must complete at least 12 hours to be recognized for honors. Summer GPA is not recognized for honors. Candidates for a 2<sup>nd</sup> bachelor's degree are not eligible for semester honors.

- *President's List:* 4.000
- *Dean's List:* 3.500-3.999

#### Graduation with Honors:

Graduation with honors is based on your overall (UNT and transfer) GPA and is documented on your UNT transcript. Candidates for a 2<sup>nd</sup> bachelor's degree are not eligible for graduation honors.

- *Cum laude:* 3.500 – 3.699
- *Magna cum laude:* 3.700 – 3.899
- *Summa cum laude:* 3.900 – 4.000

### Cancelling, Dropping or Withdrawing

#### Cancelling:

This refers to removing yourself from one, some, or all of your courses before the semester has started. You can do this via MyUNT. Refer to registrar.unt.edu for information and deadlines.

#### Dropping:

This refers to removing yourself from one or some courses (but remaining in at least one course) after the semester has started. You can do this via MyUNT. Refer to registrar.unt.edu for information and deadlines. Only 6 drops are allowed during your academic career. Once the 6 drop limit is reached, no additional drops are approved.

#### Withdrawing:

This refers to removing all of your courses after the semester has started. You are not allowed to withdraw via MyUNT. You may withdraw via the procedures and deadlines listed online. Refer to registrar.unt.edu.

*Dropping or withdrawing may affect your financial aid and/or excessive hours.*

### Retaking Courses: Course Duplications

If your transcript(s) contains the same course with an earned grade more than once, the 1<sup>st</sup> grade will be treated as a duplication and will be deleted from your GPA. Any additional grades will be calculated into your GPA. This includes transfer courses/grades. Course duplication will impact your GPA, academic status and excessive hours.

Engineering major required courses must be completed with a grade of "C" or better. Only the last grade will be used in fulfilling prerequisite, corequisite, full-major eligibility, and graduation eligibility. Contact your advisor to confirm how you will be affected if you take a course more than once.

### Incomplete Grade

An Incomplete ("I") grade is a pending grade. A professor may grant an "I" if you meet all of these conditions:

- The final drop and withdraw deadlines for the semester have passed.
- You experience an emergency situation that prohibits you from completing remaining work.
- You have been earning a passing grade to the point of the emergency situation.
- You can complete and submit outstanding work within 12 months after the grade of "I" is granted.

Professors are not required to grant an "I" even if you meet the conditions. An "I" grade does not impact your GPA but it will automatically convert to a "F" grade if you do not complete the "I" within 12 months.

### Pass/No Pass Grading Option

You may elect to take a course under the Pass/No Pass grading option if it is not a prerequisite or required for your degree plan. Certain criteria must be met and you must obtain approval from your advisor after you have enrolled in the course. A "P" or "NP" will be recorded on your transcript and is not calculated in your GPA.

### Taking Courses at another Institution: Concurrent Enrollment

Courses taken outside of UNT will not be applied to your degree audit unless you meet all of the following criteria:

- The course you plan to take has been pre-approved by your advisor.
- You do not violate the maximum semester credit hour limit or residency requirements at UNT.
- You are not attempting to graduate the same semester in which you are concurrently enrolled.
- You submit the official transcript for the course to the Registrar's Office within one month of completion.

Your department reserves the right to reject online courses and/or courses at certain institutions.

Concurrent enrollment in your last semester will delay graduation. You will not graduate or earn your degree until the following semester.

### Registration and Payment

You will use MyUNT to register for courses each semester/term. Information on registration enrollment periods, payment deadlines, etc. can be located at [registration.unt.edu](http://registration.unt.edu).

You must arrange payment prior to the payment deadline listed in MyUNT or online. Failure to pay by the deadline listed will result in the cancellation of your entire schedule of classes. You must elect a tuition plan before your 1<sup>st</sup> semester/term payment deadline. Information on plans is located at [sfs.unt.edu](http://sfs.unt.edu). You have numerous options available to pay. Refer to [registration.unt.edu/cost-funding](http://registration.unt.edu/cost-funding) for information. If you have been awarded financial aid, refer to [financialaid.unt.edu](http://financialaid.unt.edu) for information.

### Canvas

This is where professors can post course syllabi, announcements, deadlines, assignments, grades, etc. Also, through Canvas, you can communicate with your professor and classmates in each course. After registration, your enrolled courses will be added to Canvas.

## Registration Tips

### Holds:

Holds are items that you need to complete prior to registration. Your holds are listed on your "Tasks" file in MyUNT. If you have an "Advising Required" hold, you must meet with an advisor before you can register for courses in the upcoming semester.

### Full Courses/Waitlist:

If a course is full, add yourself to the waitlist. Seats are allotted in position order as fully enrolled students vacate the course. The waitlist does not guarantee a seat in the course. You can waitlist for a maximum of 3 courses per semester/term. The waitlist option ends once add/drop closes for the semester/term.

### Visual Schedule Builder:

This tool in MyUNT will allow you to graphically view schedule options based on the course time offerings that works best for you. This tool can be problematic because (1) it will include courses that are full (closed/waitlisted), (2) it does not list course location to allow commute time between main campus, Discovery Park, or the campuses in Frisco, TX. and McKinney, TX. and (3) it does not always include lab times or recitations times.

### Error Messages:

Read the message to learn why you received it and to determine if you are eligible to enroll in the course. Common errors refer to prerequisite, corequisite, and restricted sections.

### Overrides:

Contact the department that teaches the course if you received an error message by mistake and you need to enroll in the open course. Below are department contacts for some common courses:

- BIOL: Submit request at <https://biology.unt.edu/undergraduate/advising>
- BMEN: Contact Cheyenne Holcomb at [Cheyenne.Holcomb@unt.edu](mailto:Cheyenne.Holcomb@unt.edu)
- CHEM: Contact Heather Vidaurri at [heather.vidaurri@unt.edu](mailto:heather.vidaurri@unt.edu)
- CNET: Submit request at [mechanical.engineering.unt.edu/override-form](http://mechanical.engineering.unt.edu/override-form)
- CSCE: Submit request at [computerscience.engineering.unt.edu/overrides](http://computerscience.engineering.unt.edu/overrides)
- EENG: Contact Jason Mieritz at [jason.mieritz@unt.edu](mailto:jason.mieritz@unt.edu)
- ENGR: Submit request at [mechanical.engineering.unt.edu/override-form](http://mechanical.engineering.unt.edu/override-form)
- MATH: Contact Professor Krista Hines at [krista.hines@unt.edu](mailto:krista.hines@unt.edu)
- MEEN: Submit request at [mechanical.engineering.unt.edu/override-form](http://mechanical.engineering.unt.edu/override-form)
- MEET: Submit request at [mechanical.engineering.unt.edu/override-form](http://mechanical.engineering.unt.edu/override-form)
- MFET: Submit request at [mechanical.engineering.unt.edu/override-form](http://mechanical.engineering.unt.edu/override-form)
- MTSE: Contact Lisa Dunlop at [Lisa.Dunlop@unt.edu](mailto:Lisa.Dunlop@unt.edu)
- PHYS: Submit request at [physics.unt.edu/forms/physics-course-override-request](https://physics.unt.edu/forms/physics-course-override-request)
- TECM: Contact [tcoffice@unt.edu](mailto:tcoffice@unt.edu)

Be prepared to provide your name, ID number, and the course/section you are wanting to enroll in.

## Tuition Increases

### Repeated Course Tuition Increase:

If you pay under the Texas resident tuition rate and you attempt courses more than twice, you are subject to pay an additional tuition rate per semester credit hour for the repeated course. Refer to information at [sfs.unt.edu](http://sfs.unt.edu).

### Excessive Hours Tuition:

If you pay under the Texas resident tuition rate, you may be subject to a higher tuition rate once you exceed more than 30 credit hours above the number of hours required for your degree plan. Additional hours are considered excessive and will result in additional tuition charges. Refer to information at [sfs.unt.edu](http://sfs.unt.edu).

### Maximum Hours - Financial Aid:

If you receive financial aid and maintain Satisfactory Academic Progress (SAP) and Pace of Progression (POP), your aid eligibility continues until you attempt 150% of the minimum credit hours required for your degree plan. For most students, once they attempt approximately 180 credit hours, their aid is discontinued.

### Degree Audit (Plan)

The degree audit is the official document that lists all the requirements you need to complete to earn your degree. It tracks the application of completed requirements each semester/term. You can view your degree audit at [mydegreeaudit.unt.edu](http://mydegreeaudit.unt.edu). Please contact the Engineering Advising Office for any questions or concerns.

### Graduation

Graduation can usually be achieved 4 years after you are enrolled in Calculus I (MATH 1710), enrolled in the entry level engineering course(s) for your major, follow the correct requisite sequencing, follow the correct semester scheduling path, earn passing grades each semester/term, and complete approximately 30 degree required credits per year. Please note that graduation often occurs within 5-6 years for most students.

You must apply for graduation before the beginning of your final semester via MyUNT. Refer to [registrar.unt.edu](http://registrar.unt.edu) for more information and the application deadline. Failure to apply by the deadline will result in your failure to graduate or earn your degree even if you complete all of your degree audit requirements.

You cannot enroll in another institution during your final semester/term or else your graduation will be delayed. You must meet with your academic advisor for a graduation check the semester before you plan to graduate.

### Commencement

Commencement is the name of the graduation ceremony. Commencement is offered in December for students who earn their degree in fall or in May for students who earn their degree in spring. Students who earn their degree in summer can choose to attend the December or May commencement.

In order to attend commencement, you must apply for graduation before the beginning of your final semester and be approved by your academic advisor. You cannot attend commencement for a semester in which you are not graduating. Refer to [unt.edu/commencement](http://unt.edu/commencement) for more information.

### Advising

#### Academic Advisors:

Located in Discovery Park E-201, these advisors counsel you on academic goals and requirements in order to earn your degree. You should meet with your advisor each semester. Use [navigate.unt.edu](http://navigate.unt.edu) to schedule your appointment. Allow 3 weeks for an available opening and note that you will lose your appointment if you are late. Appointments are offered in-person and online (via zoom). The office phone number is 940-565-4201 & the office e-mail is [engineering.advisor@unt.edu](mailto:engineering.advisor@unt.edu).

#### Engineering Faculty Advisors:

Located in each department at Discovery Park, these professors assist with advising. They can help you with choosing the proper elective, specialization, track, or supporting area courses to prepare you to enter industry after graduation. Contact information is located on the following curriculum pages.

#### Career Advisors:

Located in Discovery Park E 201, these advisors help you with career planning/selection, resume writing, interviewing skills, internships, and full-time employment. You can schedule an appointment via [navigate.unt.edu](http://navigate.unt.edu).

#### International Advisors:

Located in Marquis Hall, these advisors help you if you are an international student to discuss policies, restrictions, and responsibilities based on your VISA type and/or sponsored scholarship type.



# BIOMEDICAL ENGINEERING (STEM Tracks)

Bachelor of Science (B.S.) degree with a major in Biomedical Engineering  
Biomedical Engineering Department, Discovery Park (NTDP) K-220; (940) 565-3338

University Core

Major Requirements  
Minimum 2.0 GPA

## COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

## AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

## AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

## FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

## STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

## CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

Major Requirements  
Minimum 2.0 GPA

## TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

## MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 2730, Multivariable Calculus (3 Hours)

OR

- MATH 3350, Numerical Analysis (3 Hours)
- ❑ MATH 3410, Differential Equations (3 Hours)

## SCIENCES

- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)
- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ 1 Lab science and lab chosen from:  
BIOL 2301, Human Anatomy & Physiology (3 Hours) & BIOL 2311, Human Anatomy & Physiology Lab (1 Hour) or  
CHEM 1420, General Chemistry II (3 Hours) & CHEM 1440, General Chemistry II Lab (1 Hour) or  
PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)

## BIOMEDICAL ENGINEERING

- ❑ BMEN 1300, Discover Biomedical Engineering (3 Hours)
- ❑ BMEN 1400, Software for Biomedical Engineers (4 Hours)
- ❑ BMEN 2210, DAQ Practices (3 Hours)
- ❑ BMEN 2320, Biomedical Instrumentation (4 Hours)
- ❑ BMEN 3310, Engr. Measurements from Human Systems (3 Hours)
- ❑ BMEN 3311, Biomedical Signal Analysis (3 Hours)
- ❑ BMEN 3312, Introduction to Biomechanics (3 Hours)
- ❑ BMEN 3321, Biomaterials (3 Hours)
- ❑ BMEN 3350, Biomedical Transport Phenomena (3 Hours)
- ❑ BMEN 4007, Biomed. Experimental Design & Data Analysis (3 Hours)
- ❑ BMEN 4212, Senior Design I (3 Hours)
- ❑ BMEN 4222, Senior Design II (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)

## BIOMEDICAL ENGINEERING ELECTIVE TRACK

Choose an elective track and complete a minimum of 6 courses (18 Hours) from the approved options below:

- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)

### *Comprehensive Biomedical Engineering:*

BMEN 3600, 4000, 4100, 4200, 4310, and 4312

### *Biomedical Instrumentation Elective Track:*

EENG 2610/2611, 2620/2621, 2710/2711, 3510, & 4\*\*\* level course.

### *Biomechanics Elective Track:*

ENGR 2301, 2302, 2332, MEEN 2210, & two MEEN 3\*\*\* and/or 4\*\*\* level courses. See advisor for specific course choices.

### *Biocomputing Elective Track:*

CSCE 1030, 1040, 2100, 2110, & two CSCE 3\*\*\* and/or 4\*\*\* level courses.

### *Biomaterials Elective Track:*

MTSE 3000, two courses from 3010, 3030, 3050, 3070, plus 3 MTSE 3\*\*\* or 4\*\*\* level courses. MTSE 3001 is strongly recommended.

### *Computational Epidemiology Track:*

CSCE 1035, CSCE 1045, CSCE 2100, CSCE 2110, CSCE 3850, and CSCE 4820

### *Pre-Medical Elective Track:*

BIOL 1710, 1720, 1760, 2041/2042, CHEM 2370/3210, BIOL 3451/3452, and 1 class/lab chosen from BIOL 3770/4580 or BIOC 3621/3622

*Additional courses are required for admissions into medical school.*

*Completion of one of the tracks above can potentially earn a minor. Consult academic advisor for more information.*

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 120 Total Hours and 36 Advanced Hours. Check with an advisor.*

# Biomedical Engineering (STEM Tracks) – 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.	Lab Science	Lab Science Lecture <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	Lab Science	Lab Science Corresponding Lab <i>Co/Pre-req: Lab Science Lecture</i>	1	F., Sp., Su.
	BMEN 1300	Discover BMEN	3	F.	BMEN 1400	Software for BMEN <i>Pre-req: MATH 1650 or higher</i>	4	Sp.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		14	
	Total Hours		17					

Year Two	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	BMEN 2320	Biomedical Instrumentation <i>Pre-reqs: BMEN 1300, 2210 Co/Pre-req: BMEN 1400</i>	4	Sp.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	BMEN 2210	DAQ Practices <i>Pre-req: MATH 1720</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		16	
	Total Hours		16					

Year Three	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	BMEN 3312	Introduction to Biomechanics <i>Pre-reqs: BMEN 3310, PHYS 1710</i>	3	Sp.
	BMEN 3310	Human Systems <i>Pre-reqs: BMEN 1300, 2320</i>	3	F.	BMEN 3321	Biomaterials <i>Pre-reqs: BMEN 3310, PHYS 1710, CHEM 1410</i>	3	Sp.
	BMEN 3311	Signal Analysis <i>Pre-req: BMEN 2320</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	BMEN 3350	Transport Phenomena <i>Pre-reqs: BMEN 1300, MATH 3410, PHYS 1710, CHEM 1410</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

Year Four	BMEN 4212	Senior Design I <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F.	BMEN 4222	Senior Design II <i>Pre-reqs: BMEN 4212</i>	3	Sp.
	BMEN 4007	Experimental Design & Data Analysis <i>Pre-req: MATH 2700</i>	3	F.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.	Total Hours		12	
	Total Hours		15					

ENGL, TECM, MATH, CHEM, BIOL, PHYS, BMEN and Elective track 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Biomedical Engineering (STEM Tracks) – Pre-Calculus

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	Lab Science	Lab Science Lecture <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	Lab Science	Lab Science Corresponding Lab <i>Co/Pre-req: Lab Science Lecture</i>	1	F., Sp., Su.
	BMEN 1300	Discover BMEN	3	F.	BMEN 1400	Software for BMEN <i>Pre-req: MATH 1650 or higher</i>	4	Sp.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		12	
	Total Hours		15					

<b>Year Two</b>	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	4	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	Total Hours		12	
	Total Hours		14					

<b>Year Three</b>	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	BMEN 2210	DAQ Practices <i>Pre-req: MATH 1720</i>	3	F.	BMEN 2320	Biomedical Instrumentation <i>Pre-reqs: BMEN 1300, 2210 Co/Pre-req: BMEN 1400</i>	4	Sp.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		13	

<b>Year Four</b>	BMEN 3310	Human Systems <i>Pre-reqs: BMEN 1300, 2320</i>	3	F.	BMEN 3312	Introduction to Biomechanics <i>Pre-reqs: BMEN 3310, PHYS 1710</i>	3	Sp.
	BMEN 3311	Signal Analysis <i>Pre-req: BMEN 2320</i>	3	F.	BMEN 3321	Biomaterials <i>Pre-reqs: BMEN 3310, PHYS 1710, CHEM 1410</i>	3	Sp.
	BMEN 3350	Transport Phenomena <i>Pre-reqs: BMEN 1300, MATH 3410, PHYS 1710, CHEM 1410</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

<b>Year Five</b>	BMEN 4212	Senior Design I <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F.	BMEN 4222	Senior Design II <i>Pre-reqs: BMEN 4212</i>	3	Sp.
	BMEN 4007	Experimental Design & Data Analysis <i>Pre-req: MATH 2700</i>	3	F.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, BIOL, PHYS, BMEN and Elective track 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Biomedical Engineering (STEM Tracks) – College Algebra

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
Year One	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	BMEN 1300	Discover BMEN	3	F., Sp., Su.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

Year Two	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.
	Lab Science	Lab Science Lecture <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.	BMEN 1400	Software for BMEN <i>Pre-req: MATH 1650 or higher</i>	4	Sp.
	Lab Science	Lab Science Corresponding Lab <i>Co/Pre-req: Lab Science Lecture</i>	1	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		14		Total Hours		14	

Year Three	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	BMEN 2210	DAQ Practices <i>Pre-req: MATH 1720</i>	3	F.	BMEN 2320	Biomedical Instrumentation <i>Pre-reqs: BMEN 1300, 2210 Co/Pre-req: BMEN 1400</i>	4	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		13	

Year Four	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	BMEN 3312	Introduction to Biomechanics <i>Pre-reqs: BMEN 3310, PHYS 1710</i>	3	Sp.
	BMEN 3310	Human Systems <i>Pre-reqs: BMEN 1300, 2320</i>	3	F.	BMEN 3321	Biomaterials <i>Pre-reqs: BMEN 3310, PHYS 1710, CHEM 1410</i>	3	Sp.
	BMEN 3311	Signal Analysis <i>Pre-req: BMEN 2320</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	BMEN 3350	Transport Phenomena <i>Pre-reqs: BMEN 1300, MATH 3410, PHYS 1710, CHEM 1410</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Total Hours		12		Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
					Total Hours		15	

Year Five	BMEN 4212	Senior Design I <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F.	BMEN 4222	Senior Design II <i>Pre-reqs: BMEN 4212</i>	3	Sp.
	BMEN 4007	Experimental Design & Data Analysis <i>Pre-req: MATH 2700</i>	3	F..	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, BIOL, PHYS, BMEN and Elective track 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# BIOMEDICAL ENGINEERING (Business Tracks)

Bachelor of Science (B.S.) degree with a major in Biomedical Engineering  
Biomedical Engineering Department, Discovery Park (NTDP) K-220; (940) 565-3338

University Core

Major Requirements  
Minimum 2.0 GPA

## COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

## AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

## AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

## FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

## STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

## CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

Major Requirements  
Minimum 2.0 GPA

## TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

## MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 2730, Multivariable Calculus (3 Hours) or MATH 3350, Numerical Analysis (3 Hours)
- ❑ MATH 3410, Differential Equations (3 Hours)

## SCIENCES

- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)
- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ 1 Lab science and lab chosen from:  
BIOL 2301, Human Anatomy & Physiology (3 Hours) & BIOL 2311, Human Anatomy & Physiology Lab (1 Hour) or  
CHEM 1420, General Chemistry II (3 Hours) & CHEM 1440, General Chemistry II Lab (1 Hour) or  
PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)

## BIOMEDICAL ENGINEERING

- ❑ BMEN 1300, Discover Biomedical Engineering (3 Hours)
- ❑ BMEN 1400, Software for Biomedical Engineers (4 Hours)
- ❑ BMEN 2210, DAQ Practices (3 Hours)
- ❑ BMEN 2320, Biomedical Instrumentation (4 Hours)
- ❑ BMEN 3310, Engr. Measurements from Human Systems (3 Hours)
- ❑ BMEN 3311, Biomedical Signal Analysis (3 Hours)
- ❑ BMEN 3312, Introduction to Biomechanics (3 Hours)
- ❑ BMEN 3321, Biomaterials (3 Hours)
- ❑ BMEN 3350, Biomedical Transport Phenomena (3 Hours)
- ❑ BMEN 4007, Biomed. Experimental Design & Data Analysis (3 Hours)
- ❑ BMEN 4212, Senior Design I (3 Hours)
- ❑ BMEN 4222, Senior Design II (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)
- ❑ BMEN 4\*\*\*, Advanced Elective (3 Hours)

## BIOMEDICAL ENGINEERING ELECTIVE TRACK

Choose an elective track and complete a minimum of 4 courses (12 Hours) from the approved options below:

- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)
- ❑ Track Elective (3 Hours)

### *Business Foundations Track:*

ACCT 2010\*, ACCT 2020, MKTG 3650 or MKTG 3651, MGMT 3720 or MGMT 3721 or MGMT 3820, FINA 3770, and a 3\*\*\* or 4\*\*\* level Business course

\*ACCT 2010 requires ECON 1100 as Pre/Co-requisite. ECON 1100 also applies towards Social and Behavioral Sciences Core requirement.

### *Entrepreneurship and Enterprise Management Track*

MGMT 3820, MGMT 3850, plus 12 hours (four courses at 3 credit hours each) from appropriate selections in catalog.

### *Management Track*

MGMT 3720 plus 15 hours (five courses at 3 credit hours each) from appropriate selections in catalog.

### *Marketing Track*

MKTG 3650 plus 15 hours (five courses at 3 credit hours each) from appropriate selections in catalog.

*Only four courses from a track are required for degree completion. Listed above are the requirements to earn a minor if you would like. See advisor for more information.*

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 120 Total Hours and 36 Advanced Hours. Check with an advisor.*

# Biomedical Engineering (Business Tracks) – Calculus I

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	<b>Year One</b>	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
CHEM 1410		General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	Lab Science	Lab Science Lecture <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.
CHEM 1430		General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	Lab Science	Lab Science Corresponding Lab <i>Co/Pre-req: Lab Science Lecture</i>	1	F., Sp., Su.
BMEN 1300		Discover BMEN	3	F.	BMEN 1400	Software for BMEN <i>Pre-req: MATH 1650 or higher</i>	4	Sp.
Comm. Core		Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
Total Hours			14		Total Hours		14	

<b>Year Two</b>	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	BMEN 2320	Biomedical Instrumentation <i>Pre-reqs: BMEN 1300, 2210 Co/Pre-req: BMEN 1400</i>	4	Sp.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	BMEN 2210	DAQ Practices <i>Pre-req: MATH 1720</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		16	
	Total Hours		16					

<b>Year Three</b>	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	BMEN 3312	Introduction to Biomechanics <i>Pre-reqs: BMEN 3310, PHYS 1710</i>	3	Sp.
	BMEN 3310	Human Systems <i>Pre-reqs: BMEN 1300, 2320</i>	3	F.	BMEN 3321	Biomaterials <i>Pre-reqs: BMEN 3310, PHYS 1710, CHEM 1410</i>	3	Sp.
	BMEN 3311	Signal Analysis <i>Pre-req: BMEN 2320</i>	3	F.	Business Elective	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	BMEN 3350	Transport Phenomena <i>Pre-reqs: BMEN 1300, MATH 3410, PHYS 1710, CHEM 1410</i>	3	F.	Business Elective	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Business Elective	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

<b>Year Four</b>	BMEN 4212	Senior Design I <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F.	BMEN 4222	Senior Design II <i>Pre-reqs: BMEN 4212</i>	3	Sp.
	BMEN 4007	Experimental Design & Data Analysis <i>Pre-req: MATH 2700</i>	3	F..	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Business Elective	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, BIOL, PHYS, BMEN and Business track 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Biomedical Engineering (Business Tracks) – Pre-Calculus

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
Year One	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	Lab Science	Lab Science Lecture <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	Lab Science	Lab Science Corresponding Lab <i>Co/Pre-req: Lab Science Lecture</i>	1	F., Sp., Su.
	BMEN 1300	Discover BMEN	3	F.	BMEN 1400	Software for BMEN <i>Pre-req: MATH 1650 or higher</i>	4	Sp.
	Total Hours		12		Total Hours		12	

Year Two	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	4	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	Total Hours		12	
	Total Hours		14					

Year Three	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>MATH 2730 Pre-req: MATH 1720</i>	3	F., Sp., Su.
	BMEN 2210	DAQ Practices <i>Pre-req: MATH 1720</i>	3	F.	BMEN 2320	Biomedical Instrumentation <i>Pre-reqs: BMEN 1300, 2210 Co/Pre-req: BMEN 1400</i>	4	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		13	

Year Four	BMEN 3310	Human Systems <i>Pre-reqs: BMEN 1300, 2320</i>	3	F.	BMEN 3312	Introduction to Biomechanics <i>Pre-reqs: BMEN 3310, PHYS 1710</i>	3	Sp.
	BMEN 3311	Signal Analysis <i>Pre-req: BMEN 2320</i>	3	F.	BMEN 3321	Biomaterials <i>Pre-reqs: BMEN 3310, PHYS 1710, CHEM 1410</i>	3	Sp.
	BMEN 3350	Transport Phenomena <i>Pre-reqs: BMEN 1300, MATH 3410, PHYS 1710, CHEM 1410</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

Year Five	BMEN 4212	Senior Design I <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F.	BMEN 4222	Senior Design II <i>Pre-reqs: BMEN 4212</i>	3	Sp.
	BMEN 4007	Experimental Design & Data Analysis <i>Pre-req: MATH 2700</i>	3	F.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, BIOL, PHYS, BMEN and Business track 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Biomedical Engineering (Business Tracks) – College Algebra

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
Year One	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	BMEN 1300	Discover BMEN	3	F., Sp., Su.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

Year Two	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.
	Lab Science	Lab Science Lecture <i>Must complete any necessary pre-reqs.</i>	3	F., Sp., Su.	BMEN 1400	Software for BMEN <i>Pre-req: MATH 1650 or higher</i>	4	Sp.
	Lab Science	Lab Science Corresponding Lab <i>Co/Pre-req: Lab Science Lecture</i>	1	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		14		Total Hours		14	

Year Three	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	BMEN 2210	DAQ Practices <i>Pre-req: MATH 1720</i>	3	F.	BMEN 2320	Biomedical Instrumentation <i>Pre-reqs: BMEN 1300, 2210 Co/Pre-req: BMEN 1400</i>	4	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		13	

Year Four	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	BMEN 3312	Introduction to Biomechanics <i>Pre-reqs: BMEN 3310, PHYS 1710</i>	3	Sp.
	BMEN 3310	Human Systems <i>Pre-reqs: BMEN 1300, 2320</i>	3	F.	BMEN 3321	Biomaterials <i>Pre-reqs: BMEN 3310, PHYS 1710, CHEM 1410</i>	3	Sp.
	BMEN 3311	Signal Analysis <i>Pre-req: BMEN 2320</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	BMEN 3350	Transport Phenomena <i>Pre-reqs: BMEN 1300, MATH 3410, PHYS 1710, CHEM 1410</i>	3	F.	Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
	Total Hours		12		Elective Course	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	Varies
					Total Hours		15	

Year Five	BMEN 4212	Senior Design I <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F.	BMEN 4222	Senior Design II <i>Pre-reqs: BMEN 4212</i>	3	Sp.
	BMEN 4007	Experimental Design & Data Analysis <i>Pre-req: MATH 2700</i>	3	F..	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	BMEN 4***	Elective Track Course <i>Must complete any necessary pre-reqs.</i>	3	F.	BMEN 4***	BMEN Advanced Elective <i>Pre-reqs: BMEN 3*** Requirements</i>	3	F., Sp.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, BIOL, PHYS, BMEN and Business track 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.



# Computer Engineering

Bachelor of Science (B.S.) degree with a major in Computer Engineering  
Department of Computer Science and Engineering, Discovery Park (NTDP) F-201; (940) 565-2767

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## Major Requirements

Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 2730, Multivariable Calculus (3 Hours)
- ❑ MATH 1780, Probability Models (3 Hours) or MATH 3680, Applied Statistics (3 Hours)

### SCIENCES

- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)
- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)

### MISC. Elective

- ❑ 1 course (3 Hours) may be required to reach 121 total hours (check with advisor)

## Major Requirements

Grades of C or better

### ELECTRICAL ENGINEERING

- ❑ EENG 2610, Circuit Analysis (3 Hours) & EENG 2611, Circuit Analysis Lab (1 Hour)
- ❑ EENG 2710, Digital Logic Design (3 Hours) & EENG 2711, Digital Logic Lab (1 Hour)
- ❑ EENG 3510, Electronics I (3 Hours)

### COMPUTER SCIENCE AND ENGINEERING

- ❑ CSCE 1030, Computer Science I (4 Hours)
- ❑ CSCE 1040, Computer Science II (3 Hours)
- ❑ CSCE 2100, Foundations of Computing (3 Hours)
- ❑ CSCE 2110, Foundations of Data Structures (3 Hours)
- ❑ CSCE 2610, Assembly Lang. & Computer Organization (3 Hours)
- ❑ CSCE 3010, Signals & Systems (3 Hours)
- ❑ CSCE 3020, Communication Systems (3 Hours)
- ❑ CSCE 3600, Principles of Systems Programming (3 Hours)
- ❑ CSCE 3610, Introduction to Computer Architecture (3 Hours)
- ❑ CSCE 3612, Embedded Systems Design (3 Hours)
- ❑ CSCE 3730, Reconfigurable Logic (3 Hours)
- ❑ CSCE 4011, Engineering Ethics (3 Hours)
- ❑ CSCE 4910, Senior Design I (3 Hours)
- ❑ CSCE 4915, Senior Design II (3 Hours)

### SPECIALTY AREA

Choose a specialty area and complete 3 courses from the approved options below:

- ❑ Specialty Elective (3 Hours)
- ❑ Specialty Elective (3 Hours)
- ❑ Specialty Elective (3 Hours)

*Artificial Intelligence and Machine Learning (Choose 3 courses):*

CSCE 3110, 4200, 4201, 4205, 4290, 4380, 4890

*Real-time & Embedded Systems Specialty Area (Choose 3 courses):*

CSCE 3444, 4440, 4600, 4610, 4620, 4730, 4890

*VLSI & Electronics Specialty Area (Choose 3 courses):*

CSCE 4610, 4730, 4890, PHYS 4500

*Communications & Networks Specialty Area (Choose 3 courses):*

CSCE 3420, 3530, 3550, 4510, 4520, 4530, 4560, 4890

*Computer Systems Specialty Area (Choose 3 courses):*

CSCE 4050, 4160, 4240, 4600, 4610, 4620, 4650, 4730, 4890

*Maximum of 6 hours may be taken from CSCE 4890.*

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 121 Total Hours and 39 Advanced Hours. Check with an advisor.*

# Computer Engineering – 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> <i>Co-req: CHEM 1430</i>	3	F., Sp., Su.	CSCE 1040	Computer Science II <i>Pre-req: CSCE 1030</i> <i>Co/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.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710. Co-req: PHYS 1730</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	Total Hours		15		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		16	

Year Two	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 1780	Probability Models <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710, 1730</i> <i>Co-req: PHYS 2240</i>	3	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 2610	Assembly Lang. & Computer Org. <i>Pre-req: CSCE 2100</i> <i>Co/Pre-req: EENG 2710, 2711</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic <i>Co-req: EENG 2711</i>	3	F., Sp., Su.	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720</i> <i>Co/pre-req: PHYS 2220, 2240, EENG 2611</i>	3	F., Sp., Su.
	EENG 2711	Digital Logic Lab <i>Co-req: EENG 2710</i>	1	F., Sp., Su.	EENG 2611	Circuit Analysis Lab <i>Co/pre-req: EENG 2610</i>	1	F., Sp., Su.
	Total Hours		14		Total Hours		16	

Year Three	CSCE 3010	Signals and Systems <i>Pre-reqs: EENG 2610, 2611, MATH 2730 or 3410</i>	3	F.	CSCE 3020	Communications Systems <i>Pre-req: CSCE 3010</i>	3	Sp.
	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.	CSCE 3610	Intro to Computer Architecture <i>Pre-reqs: CSCE 2610 and CSCE 3730</i>	3	Sp.
	CSCE 3730	Reconfigurable Logic <i>Pre-req: CSCE 2610</i>	3	F.	CSCE 3612	Embedded Systems <i>Pre-reqs: CSCE 2610, EENG 2710, 2711</i>	3	Sp.
	EENG 3510	Electronics I <i>Pre-req: EENG 2610, 2611</i>	3	F., Sp., Su.	CSCE Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

Year Four	CSCE 4910	Senior Design I <i>Pre-reqs: CSCE 3612, EENG 3510</i>	3	F.	CSCE 4915	Senior Design II <i>Pre-req: CSCE 4910</i>	3	Sp.
	CSCE Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.	CSCE 4011	Engineering Ethics <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	MISC Elective	MISC. Elective to reach 121 Hours (If needed)	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, EENG, and CSCE 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Computer Engineering – Pre-Calculus

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		17	
	Total Hours		18					

<b>Year Two</b>	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710, 1730 Co-req: PHYS 2240</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	CSCE 1040	Computer Science II <i>Pre-req: CSCE 1030 Co/Pre-req: MATH 1710</i>	3	F., Sp., Su.	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic <i>Co-req: EENG 2711</i>	3	F., Sp., Su.	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720 Co/pre-req: PHYS 2220, 2240, EENG 2611</i>	3	F., Sp., Su.
	EENG 2711	Digital Logic Lab <i>Co-req: EENG 2710</i>	1	F., Sp., Su.	EENG 2611	Circuit Analysis Lab <i>Co/pre-req: EENG 2610</i>	1	F., Sp., Su.
	Total Hours		14		Total Hours		14	

<b>Year Three</b>	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 1780	Probability Models <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.
	CSCE 2610	Assembly Lang. & Computer Org. <i>Pre-reqs: CSCE 2100, Co/Pre-req: EENG 2710</i>	3	F., Sp., Su.	CSCE 3612	Embedded Systems <i>Pre-reqs: CSCE 2610, EENG 2710, 2711</i>	3	Sp.
	EENG 3510	Electronics I <i>Pre-req: EENG 2610, 2611</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

<b>Year Four</b>	CSCE 3010	Signals and Systems <i>Pre-reqs: EENG 2610, 2611, MATH 2730 or 3410</i>	3	F.	CSCE 3020	Communications Systems <i>Pre-req: CSCE 3010</i>	3	Sp.
	CSCE 3730	Reconfigurable Logic <i>Pre-req: CSCE 2610</i>	3	F.	CSCE 3610	Intro to Computer Architecture <i>Pre-reqs: CSCE 2610 and CSCE 3730</i>	3	Sp.
	CSCE 4910	Senior Design I <i>Pre-reqs: CSCE 3612, EENG 3510</i>	3	F.	CSCE 4011	Engineering Ethics <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.	CSCE 4915	Senior Design II <i>Pre-req: CSCE 4910</i>	3	Sp.
	CSCE Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.	CSCE Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, EENG, and CSCE 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Computer Engineering – College Algebra

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 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

Year Two	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.
	CSC 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.	CSC 1040	Computer Science II <i>Pre-req: CSC 1030 Co/Pre-req: MATH 1710</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	Total Hours		13		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		13	

Year Three	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710, 1730 Co-req: PHYS 2240</i>	3	F., Sp., Su.	CSC 2110	Foundations of Data Structures <i>Pre-req: CSC 1040 or CSC 1045</i>	3	F., Sp., Su.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	CSC 2610	Assembly Lang. & Computer Org. <i>Pre-reqs: CSC 2100, Co/Pre-req: EENG 2710</i>	3	F., Sp., Su.
	CSC 2100	Foundations of Computing <i>Pre-req: CSC 1040 or CSC 1045</i>	3	F., Sp., Su.	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720 Co/pre-req: PHYS 2220, 2240, EENG 2611</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic <i>Co-req: EENG 2711</i>	3	F., Sp., Su.	EENG 2611	Circuit Analysis Lab <i>Co/pre-req: EENG 2610</i>	1	F., Sp., Su.
	EENG 2711	Digital Logic Lab <i>Co-req: EENG 2710</i>	1	F., Sp., Su.	Total Hours		13	
	Total Hours		14					

Year Four	MATH 1780	Probability Models <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	CSC 3020	Communications Systems <i>Pre-req: CSC 3010</i>	3	Sp.
	CSC 3010	Signals and Systems <i>Pre-reqs: EENG 2610, 2611, MATH 2730 or 3410</i>	3	F.	CSC 3600	Systems Programming <i>Pre-reqs: CSC 2110</i>	3	F., Sp.
	CSC 3730	Reconfigurable Logic <i>Pre-req: CSC 2610</i>	3	F.	CSC 3610	Intro to Computer Architecture <i>Pre-reqs: CSC 2610 and CSC 3730</i>	3	Sp.
	EENG 3510	Electronics I <i>Pre-req: EENG 2610, 2611</i>	3	F., Sp., Su.	CSC 3612	Embedded Systems <i>Pre-reqs: CSC 2610, EENG 2710, 2711</i>	3	Sp.
	Total Hours		12		Total Hours		12	

Year Five	CSC 4910	Senior Design I <i>Pre-reqs: CSC 3612, EENG 3510</i>	3	F.	CSC 4011	Engineering Ethics <i>Pre-req: CSC 3600</i>	3	F., Sp.
	CSC Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.	CSC 4915	Senior Design II <i>Pre-req: CSC 4910</i>	3	Sp.
	CSC Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.	CSC Specialty	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, PHYS, EENG, and CSC 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Computer Science

Bachelor of Science (B.S.) degree with a major in Computer Science

Department of Computer Science and Engineering, Discovery Park (NTDP) F-201; (940) 565-2767

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see [mydegreeaudit.unt.edu](http://mydegreeaudit.unt.edu)

**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see [mydegreeaudit.unt.edu](http://mydegreeaudit.unt.edu)

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see [mydegreeaudit.unt.edu](http://mydegreeaudit.unt.edu)

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see [mydegreeaudit.unt.edu](http://mydegreeaudit.unt.edu)

## Major Requirements

Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)
- ❑ 1 Advanced TECM course chosen from:
  - TECM 4180, Advanced Technical Writing (3 Hours)
  - TECM 4190, Technical Editing
  - TECM 4200, Research Methods (3 Hours)
  - TECM 4250, Writing Procedures and Manuals (3 Hours)
  - TECM 4700, Writing in the Sciences (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 1780, Probability Models (3 Hours), or  
MATH 3680, Applied Statistics (3 Hours)

### SCIENCES – BIOLOGY AND/OR CHEMISTRY

- ❑ 1 Lab science and lab chosen from list options below
- ❑ 1 Lab science and lab chosen from list options below
  - CHEM 1410, General Chemistry I (3 Hours) &  
CHEM 1430, General Chemistry I Lab (1 Hour)
  - CHEM 1420, General Chemistry II (3 Hours) &  
CHEM 1440, General Chemistry II Lab (1 Hour)
  - BIOL 1710, Biology I (3 Hours)
  - BIOL 1720, Biology II (3 Hours)
  - BIOL 1760, Biology Lab (2 Hours)

## Major Requirements

Grades of C or better

### SCIENCES - PHYSICS

- ❑ PHYS 1710, Mechanics (3 Hours) &  
PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) &  
PHYS 2240, Electricity & Magnetism Lab (1 Hour)

### ELECTRICAL ENGINEERING

- ❑ EENG 2710, Digital Logic Design (3 Hours)

### COMPUTER SCIENCE AND ENGINEERING

- ❑ CSCE 1030, Computer Science I (4 Hours)
- ❑ CSCE 1040, Computer Science II (3 Hours)
- ❑ CSCE 2100, Foundations of Computing (3 Hours)
- ❑ CSCE 2110, Foundations of Data Structures (3 Hours)
- ❑ CSCE 2610, Assembly Lang. & Computer Organization (3 Hours)
- ❑ CSCE 3110, Data Structures (3 Hours)
- ❑ CSCE 3444, Software Engineering (3 Hours)
- ❑ CSCE 3600, Principles of Systems Programming (3 Hours)
- ❑ CSCE 4010, Social Issues in Computing (3 Hours)
- ❑ CSCE 4110, Algorithms (3 Hours)
- ❑ CSCE 4901, Capstone I (3 Hours) \*
- ❑ CSCE 4902, Capstone II (3 Hours) \*

### COMPUTER SCIENCE AND ENGINEERING CORE ELECTIVES

- ❑ 1 CSCE Core course (3 Hours) chose from list options below
- ❑ 1 CSCE Core course (3 Hours) chose from list options below
  - CSCE 3530, Introduction to Computer Networks (3 Hours)
  - CSCE 4115, Formal Lang., Automata and Compatibility (3 Hours)
  - CSCE 4430, Programming Languages (3 Hours)
  - CSCE 4600, Introduction to Operating Systems (3 Hours)
  - CSCE 4650, Introduction to Compilation Techniques (3 Hours)

### COMPUTER SCIENCE AND ENGINEERING BREADTH ELECTIVES

- ❑ 1 CSCE Breadth course (3 Hours) chose from list options below
- ❑ 1 CSCE Breadth course (3 Hours) chose from list options below
  - CSCE 3550, Foundations of Computer Security (3 Hours)
  - CSCE 4201, Introduction to Artificial Intelligence (3 Hours)
  - CSCE 4210, Game Programming I (3 Hours)
  - CSCE 4230, Introduction to Computer Graphics (3 Hours)
  - CSCE 4240, Introduction to Digital Image Processing (3 Hours)
  - CSCE 4290, Introduction to Natural Language Processing (3 Hours)
  - CSCE 4350, Fundamentals of Database Systems (3 Hours)
  - CSCE 4460, Software Testing and Empirical Methodologies (3 Hours)

### COMPUTER SCIENCE AND ENGINEERING FREE ELECTIVES:

- ❑ CSCE 3\*\*\* or 4\*\*\* (3 Hours) course not already applied above
- ❑ CSCE 3\*\*\* or 4\*\*\* (3 Hours) course not already applied above

*Maximum of 6 hours may be taken from CSCE 4890, CSCE 4920, CSCE 4930, CSCE 4940, and/or CSCE 4950.*

*\*CSCE 4999, Senior Thesis (3 Hours) may replace Capstones with an addition of a CSCE 3\*\*\* or 4\*\*\* (3 Hour) elective course*

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change.*

*You may need elective courses to help reach a minimum of 120 Total Hours and 42 Advanced Hours. Check with an advisor.*

# Computer Science – Calculus I

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	<b>Year One</b>	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
CHEM 1410		General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	CSCE 1040	Computer Science II <i>Pre-req: CSCE 1030 Co/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.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
CSCE 1030		Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	BIOL 1710	Biology I	3	F., Sp., Su.
Comm. Core		Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	BIOL 1760	BIOL Lab <i>Co/Pre-req: BIOL 1710</i>	2	F., Sp., Su.
Total Hours			15		Total Hours		14	

<b>Year Two</b>	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 1780	Probability Models <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic Design	3	F., Sp., Su.	CSCE 2610	Assembly Lang. & Computer Org. <i>Pre-reqs: CSCE 2100 Co/Pre-req: EENG 2710</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16		Total Hours		16	

<b>Year Three</b>	CSCE 3110	Data Structures <i>Pre-req: CSCE 2100, 2110</i>	3	F., Sp., Su.	CSCE 3444	Software Engineering <i>Pre-reqs: CSCE 3110</i>	3	F., Sp., Su.
	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.	CSCE 4110	Analysis of Algorithms <i>Pre-reqs: CSCE 3110</i>	3	F., Sp., Su.
	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp., Su.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	TECM 4***	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

<b>Year Four</b>	CSCE 4010	Social Issues <i>Pre-reqs: CSCE 3600</i>	3	F., Sp., Su.	CSCE 4902	Capstone II <i>Pre-req: CSCE 4901</i>	3	Sp.
	CSCE 4901	Capstone I <i>Pre-reqs: TECM 2700, CSCE 3444 Co/Pre-req: CSCE 4110</i>	3	F.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Misc. Elective	Misc. Elective to reach 120 hours (if needed)	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, EENG, and CSCE require minimum grade of "C" for completion and/or prerequisite. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Computer Science – Pre-Calculus

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 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	BIOL 1710	Biology I	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	BIOL 1760	BIOL Lab <i>Co/Pre-req: BIOL 1710</i>	2	F., Sp., Su.
	Total Hours		15		Total Hours		16	

Year Two	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 1780	Probability Models <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	CSCE 1040	Computer Science II <i>Pre-req: CSCE 1030 Co/Pre-req: MATH 1710</i>	3	F., Sp., Su.	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic Design	3	F., Sp., Su.	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16		Total Hours		16	

Year Three	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	CSCE 3444	Software Engineering <i>Pre-reqs: CSCE 3110</i>	3	F., Sp., Su.
	CSCE 2610	Assembly Lang. & Computer Org. <i>Pre-reqs: CSCE 2100, Co/Pre-req: EENG 2710</i>	3	F., Sp.	CSCE 4110	Analysis of Algorithms <i>Pre-reqs: CSCE 3110</i>	3	F., Sp., Su.
	CSCE 3110	Data Structures <i>Pre-req: CSCE 2100, 2110</i>	3	F., Sp., Su.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

Year Four	CSCE 4010	Social Issues <i>Pre-reqs: CSCE 3600</i>	3	F., Sp., Su.	CSCE 4902	Capstone II <i>Pre-req: CSCE 4901</i>	3	Sp.
	CSCE 4901	Capstone I <i>Pre-reqs: TECM 2700, CSCE 3444 Co/Pre-req: CSCE 4110</i>	3	F.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	CSCE Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	TECM 4***	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options at mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, EENG, and CSCE require minimum grade of "C" for completion and/or prerequisite. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Computer Science – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
Year One	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

Year Two	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.
	CSCS 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.	CSCS 1040	Computer Science II <i>Pre-req: CSCS 1030, Co/Pre-req: MATH 1710</i>	3	F., Sp., Su.
	BIOL 1710	Biology I	3	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	BIOL 1760	Biology Lab <i>Co/Pre-req: BIOL 1710</i>	2	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	Total Hours		13		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		13	

Year Three	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 1780	Probability Models <i>Pre-reqs: MATH 1710</i>	3	F., Sp., Su.
	CSCS 2100	Foundations of Computing <i>Pre-req: CSCS 1040 or CSCS 1045</i>	3	F., Sp.	CSCS 2110	Foundations of Data Structures <i>Pre-reqs: CSCS 1040 or CSCS 1045</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic Design	3	F., Sp., Su.	CSCS 2610	Assembly Lang. & Computer Org. <i>Pre-reqs: CSCS 2100, Co/Pre-req: EENG 2710</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		1		Total Hours		15	

Year Four	CSCS 3110	Data Structures <i>Pre-req: CSCS 2100, 2110</i>	3	F., Sp., Su.	CSCS 3444	Software Engineering <i>Pre-reqs: CSCS 3110</i>	3	F., Sp.
	CSCS 3600	Systems Programming <i>Pre-req: CSCS 2110</i>	3	F., Sp., Su.	CSCS 4010	Social Issues <i>Pre-reqs: CSCS 3600</i>	3	F., Sp.
	CSCS Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	CSCS 4110	Analysis of Algorithms <i>Pre-reqs: CSCS 3110</i>	3	F., Sp., Su.
	TECM 4***	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	CSCS Elective	Options on mydegreeaudit.unt.edu	3	F., Sp.
	Total Hours		12		Total Hours		12	

Year Five	CSCS 4901	Capstone I <i>Pre-reqs: TECM 2700, CSCS 3444 Co/Pre-req: CSCS 4110</i>	3	F.	CSCS 4902	Capstone II <i>Pre-req: CSCS 4901</i>	3	Sp.
	CSCS Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	CSCS Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	CSCS Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options at mydegreeaudit.unt.edu	3	F., Sp., Su.
	CSCS Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	



# Construction Engineering Technology

Bachelor of Science in Engineering Technology (B.S.E.T) degree with a major in Construction Engineering Technology  
Department of Mechanical Engineering, DiscoveryPark (NTDP) F-115; (940) 565-2400

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ ECON 1100 (3 Hours) – see mydegreeaudit.unt.edu

## Major Requirements Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)

### SCIENCES

- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)
- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)

### MISC. Elective

- ❑ 1 course (3 Hours) may be required to reach 123 total hours (check with advisor)

## Major Requirements Grades of C or better

### CONSTRUCTION ENGINEERING TECHNOLOGY

- ❑ CNET 1160, Construction Methods and Materials (3 Hours)
- ❑ CNET 2180, Building Construction Techniques (3 Hours)
- ❑ CNET 2300, Construction Graphics and Modeling (3 Hours)
- ❑ CNET 3150, Construction Contract Documents (3 Hours)
- ❑ CNET 3160, Construction Cost Estimating (3 Hours)
- ❑ CNET 3190, Construction Scheduling (3 Hours)
- ❑ CNET 3410, Occupational Safety and Liability (3 Hours)
- ❑ CNET 3430, Structural Analysis (3 Hours)
- ❑ CNET 3440, Steel Structures (3 Hours)
- ❑ CNET 3460, Soils and Foundations (3 Hours)
- ❑ CNET 3480, Structural Design with Concrete, Timber, etc. (3 Hours)
- ❑ CNET 4170, Construction Management (3 Hours)
- ❑ CNET 4180, Problems in Project Management (3 Hours)
- ❑ CNET 4190, Quality Management in Construction (3 Hours)
- ❑ CNET 4620, Adv. Design in Cold-Formed Steel Structures (3 Hours)
- ❑ CNET 4780, Senior Design I (1 Hour)
- ❑ CNET 4790, Senior Design II (3 Hours)
  
- ❑ ENGR 1030, Technical Systems (3 Hours)
- ❑ ENGR 2301, Statics (3 Hours)
- ❑ ENGR 2332, Mechanics of Materials (3 Hours)

### BUSINESS

- ❑ ACCT 2010, Accounting Principles I (3 Hours)
- ❑ BLAW 3430, Legal and Ethical Environment of Business (3 Hours)
- ❑ BLAW 4770, Real Estate Law and Contracts (3 Hours)
- ❑ ECON 1100, Microeconomics (3 Hours)
- ❑ DSCI 2710, Data Analysis with Spreadsheets (3 Hours)

### TECHNICAL ELECTIVES

- ❑ Any level course chosen from appropriate elective options (4 Hours)

*Electives must be chosen from the subjects of business, engineering, mathematics, and science. Check with an advisor for appropriate technical elective course options. Suggestions include, but are not limited to:*

MATH 1600	CNET 3450	ACCT 2020	CHEM 1420
MATH 1610	CNET 4190	LSCM 3960	PHYS 3010
MATH 1650	CNET 4230	MKTG 3010	
MATH 2700	CSCE 1030	MKTG 3651	
MATH 2730	ENGR 1304	MGMT 3330	
MATH 3410	ENGR 2302	MGMT 3721	
MATH 3680	ENGR 3450	MGMT 3820	
	MFET 3110	MGMT 3850	
		MGMT 4470	

# Construction 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.
	CNET 1160	Construction Methods and Materials	3	F.	CNET 2180	Building Construction Techniques <i>Pre-req: CNET 1160</i>	3	Sp.
	ENGR 1030	Technological Systems	3	F., Sp.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	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.	ACCT 2010	Accounting Principles I <i>Pre-req: ECON 1100</i>	3	F., Sp., Su.
	PHYS 2240	Electricity and Magnetism Lab <i>Co-req/pre-req: PHYS 2220</i>	1	F., Sp., Su.	CNET 4190	Quality Management in Construction <i>Pre-req: CNET 2180</i>	3	Sp.
	CNET 2300	Construction Graphics and Modeling	3	F.	ENGR 2332	Mechanics and Materials <i>Pre-req: ENGR 2301</i>	3	F., Sp., Su.
	ENGR 2301	Statics <i>Pre-reqs: PHYS 1710, 1730</i>	3	F., Sp., Su.	DSCI 2710	Data Analysis with Spreadsheets <i>Pre-req: College Math Readiness</i>	3	F., Sp., Su.
	ECON 1100	Microeconomics <i>Fulfills Social and Behavioral Science Core</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		15	
	Total Hours		16					

Year Three	CNET 3150	Construction Contract Documents <i>Pre-req: CNET 2180</i>	3	F.	CNET 3190	Construction Scheduling <i>Pre-req: CNET 3160</i>	3	Sp.
	CNET 3160	Construction Cost Estimating <i>Pre-req: CNET 2180</i>	3	F.	CNET 3440	Steel Structures <i>Pre-req: CNET 3430</i>	3	Sp.
	CNET 3430	Structural Analysis <i>Pre-req: ENGR 2332</i>	3	F.	CNET 3460	Soils and Foundations <i>Pre-req: CNET 2180, ENGR 2332</i>	3	Sp.
	BLAW 3430	Legal and Ethical Environment of BUSI <i>Pre-req: PSCI 2305, 2306</i>	3	F., Sp., Su.	CNET 3410	Occupational Safety and Liability	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

Year Four	CNET 3480	Structural Design with Concrete, Timber, etc. <i>Pre-req: CNET 2180, 3430</i>	3	F.	CNET 4180	Problems in Project Management <i>Pre-req: CNET 4170</i>	3	Sp.
	CNET 4170	Construction Management <i>Pre-req: CNET 3160</i>	3	F.	CNET 4620	Adv. Design in Cold-Formed Steel Struc. <i>Pre-req: CNET 3430</i>	3	F., Sp.
	CNET 4780	Senior Design I <i>Pre-req: Senior Class., CNET 3190, 3440, 3460</i>	1	F.	CNET 4790	Senior Design II <i>Pre-req: CNET 4780</i>	3	F., Sp.
	BLAW 4770	Real Estate Law and Contracts	3	F., Sp.	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	4	Varies
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	MISC Elective	MISC. Elective to reach 124 Hours (If needed)	3	F., Sp., Su.
	Total Hours		13		Total Hours		16	

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CNET, and Business Courses require a minimum grade of "C" for completion and/or prerequisites. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Construction Engineering Technology – Pre-Calculus

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	<b>Year One</b>	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4
CNET 1160		Construction Methods and Materials	3	F.	CNET 2180	Building Construction Techniques <i>Pre-req: CNET 1160</i>	3	Sp.
ENGR 1030		Technological Systems	3	F., Sp.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
Comm. Core		Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
Total Hours			14		TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
					Total Hours		14	

<b>Year Two</b>	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	ENGR 2301	Statics <i>Pre-reqs: PHYS 1710, 1730</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity and Magnetism <i>Pre-reqs: MATH 1720, PHYS 1710, 1730</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F.	PHYS 2240	Electricity and Magnetism Lab <i>Co-req/pre-req: PHYS 2220</i>	1	F., Sp., Su.
	CNET 2300	Construction Graphics and Modeling	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	ECON 1100	Microeconomics <i>Fulfills Social and Behavioral Science Core</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		13		Total Hours		13	

<b>Year Three</b>	ENGR 2332	Mechanics and Materials <i>Pre-req: ENGR 2301</i>	3	F., Sp., Su.	DSCI 2710	Data Analysis with Spreadsheets <i>Pre-req: College Math Readiness</i>	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CNET 3410	Occupational Safety and Liability	3	Sp.
	ACCT 2010	Accounting Principles I <i>Pre-req: ECON 1100</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

<b>Year Four</b>	CNET 3150	Construction Contract Documents <i>Pre-req: CNET 2180</i>	3	F.	CNET 3190	Construction Scheduling <i>Pre-req: CNET 3160</i>	3	Sp.
	CNET 3160	Construction Cost Estimating <i>Pre-req: CNET 2180</i>	3	F.	CNET 3440	Steel Structures <i>Pre-req: CNET 3430</i>	3	Sp.
	CNET 3430	Structural Analysis <i>Pre-req: ENGR 2332</i>	3	F.	CNET 3460	Soils and Foundations <i>Pre-req: CNET 2180, ENGR 2332</i>	3	Sp.
	BLAW 3430	Legal and Ethical Environment of BUSI <i>Pre-req: PSCI 2305, 2306</i>	3	F., Sp.	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	Total Hours		12		Total Hours		12	

<b>Year Five</b>	CNET 3480	Structural Design with Concrete, Timber, etc. <i>Pre-req: CNET 2180, 3430</i>	3	F.	CNET 4180	Problems in Project Management <i>Pre-req: CNET 4170</i>	3	Sp.
	CNET 4170	Construction Management <i>Pre-req: CNET 3160</i>	3	F.	CNET 4190	Quality Management in Construction <i>Pre-req: CNET 2180</i>	3	Sp.
	CNET 4780	Senior Design I <i>Pre-req: Senior Class., CNET 3190, 3440, 3460</i>	1	F.	CNET 4620	Adv. Design in Cold-Formed Steel Struc. <i>Pre-req: CNET 3430</i>	3	Sp.
	BLAW 4770	Real Estate Law and Contracts	3	F., Sp.	CNET 4790	Senior Design II <i>Pre-req: CNET 4780</i>	3	Sp.
	MISC Elective	MISC. Elective to reach 124 Hours (If needed)	3	Varies	Total Hours		12	
	Total Hours		13					

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CNET, and Business Courses require a minimum grade of "C" for completion and/or prerequisite. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Construction Engineering Technology – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	CNET 1160	Construction Methods and Materials	3	F.	CNET 2180	Building Construction Techniques <i>Pre-req: CNET 1160</i>	3	Sp.
	ENGR 1030	Technological Systems	3	F., Sp.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	Total Hours		12		Total Hours		12	

<b>Year Two</b>	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.
	CNET 2300	Construction Graphics and Modeling	3	F.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	Sp.
	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	ECON 1100	Microeconomics <i>Fulfills Social and Behavioral Science Core</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		13		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		13	

<b>Year Three</b>	ENGR 2301	Statics <i>Pre-reqs: PHYS 1710, 1730</i>	3	F., Sp., Su.	ENGR 2332	Mechanics and Materials <i>Pre-req: ENGR 2301</i>	3	F., Sp., Su.
	PHYS 2220	Electricity and Magnetism <i>Pre-reqs: MATH 1720, PHYS 1710, 1730</i>	3	F., Sp., Su.	ACCT 2010	Accounting Principles I <i>Pre-req: ECON 1100</i>	3	F., Sp., Su.
	PHYS 2240	Electricity and Magnetism Lab <i>Co-req/pre-req: PHYS 2220</i>	1	F., Sp., Su.	CNET 3410	Occupational Safety and Liability	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		12	
	Total Hours		13					

<b>Year Four</b>	CNET 3150	Construction Contract Documents <i>Pre-req: CNET 2180</i>	3	F.	CNET 3190	Construction Scheduling <i>Pre-req: CNET 3160</i>	3	Sp.
	CNET 3160	Construction Cost Estimating <i>Pre-req: CNET 2180</i>	3	F.	CNET 3440	Steel Structures <i>Pre-req: CNET 3430</i>	3	Sp.
	CNET 3430	Structural Analysis <i>Pre-req: ENGR 2332</i>	3	F.	CNET 3460	Soils and Foundations <i>Pre-req: CNET 2180, ENGR 2332</i>	3	Sp.
	BLAW 3430	Legal and Ethical Environment of BUSI <i>Pre-req: PSCI 2305, 2306</i>	3	F., Sp., Su.	DSCI 2710	Data Analysis with Spreadsheets <i>Pre-req: College Math Readiness</i>	3	F., Sp.
	Total Hours		13		Total Hours		12	

<b>Year Five</b>	CNET 3480	Structural Design with Concrete, Timber, etc. <i>Pre-req: CNET 2180, 3430</i>	3	F.	CNET 4180	Problems in Project Management <i>Pre-req: CNET 4170</i>	3	Sp.
	CNET 4170	Construction Management <i>Pre-req: CNET 3160</i>	3	F.	CNET 4190	Quality Management in Construction <i>Pre-req: CNET 2180</i>	3	Sp.
	CNET 4780	Senior Design I <i>Pre-req: Senior Class., CNET 3190, 3440, 3460</i>	1	F.	CNET 4620	Adv. Design in Cold-Formed Steel Struc. <i>Pre-req: CNET 3430</i>	3	Sp.
	BLAW 4770	Real Estate Law and Contracts	3	F., Sp.	CNET 4790	Senior Design II <i>Pre-req: CNET 4780</i>	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		12	
	Total Hours		13					

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CNET, and Business Courses require a minimum grade of "C" for completion and/or prerequisite. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Construction Management

Bachelor of Science (B.S) degree with a major in Construction Management  
Department of Mechanical Engineering, DiscoveryPark (NTDP) F-115; (940) 565-2400

University Core

Major Requirements  
Grades of C or better

## COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu  
**Grade of “C” or better is required**

## AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

## AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

## FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

## STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

## CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## SOCIAL AND BEHAVIORAL SCIENCES

- ❑ ECON 1100 (3 Hours) – see mydegreeaudit.unt.edu

Major Requirements  
Grades of C or better

## WRITING/TECHNICAL COMMUNICATIONS

- ❑ 1 course chosen from list options below  
TECM 2700, Technical Writing (3 Hours)  
ENGL 1320, First-Year English Writing II (3 Hours)  
ENGL 1321, Honors First-Year Writing II (3 Hours)

## MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours) or  
MATH 1190, Business Calculus (3 Hours)

## SCIENCES

- ❑ PHYS 1410, General Physics I (3 Hours) &  
PHYS 1430, General Physics I Lab (1 Hour) or  
PHYS 1710, Mechanics (3 Hours) &  
PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 1420, General Physics II (3 Hours) &  
PHYS 1440, General Physics II Lab (1 Hour) or  
PHYS 2220, Electricity & Magnetism (3 Hours) &  
PHYS 2240, Electricity & Magnetism Lab (1 Hour)

## CONSTRUCTION ENGINEERING TECHNOLOGY

- ❑ CNET 1160, Construction Methods and Materials (3 Hours)
- ❑ CNET 2180, Building Construction Techniques (3 Hours)
- ❑ CNET 2200, Surveying for Construction (3 Hours)
- ❑ CNET 2300, Construction Graphics and Modeling (3 Hours)
- ❑ CNET 3150, Construction Contract Documents (3 Hours)
- ❑ CNET 3160, Construction Cost Estimating (3 Hours)
- ❑ CNET 3190, Construction Scheduling (3 Hours)
- ❑ CNET 3410, Occupational Safety and Liability (3 Hours)
- ❑ CNET 3435, Structural Analysis (3 Hours)
- ❑ CNET 3445, Steel Structures (3 Hours)
- ❑ CNET 3465, Soils and Foundations (3 Hours)
- ❑ CNET 3485, Structural Design with Concrete, Timber, etc. (3 Hours)
- ❑ CNET 4170, Construction Management (3 Hours)
- ❑ CNET 4180, Problems in Project Management (3 Hours)
- ❑ CNET 4190, Quality Management in Construction (3 Hours)
- ❑ CNET 4630, Construction Management for MEP Systems (3 Hours)
- ❑ CNET 4785, Senior Design I (1 Hour)
- ❑ CNET 4795, Senior Design II (3 Hours)
- ❑ CNET 4920, Cooperative Education Internship (1 Hour)
  
- ❑ ENGR 1030, Technical Systems (3 Hours)
- ❑ ENGR 2304, Statics and Strengths of Materials (3 Hours)

## BUSINESS

- ❑ ACCT 2010, Accounting Principles I (3 Hours)
- ❑ BLAW 3430, Legal and Ethical Environment of Business (3 Hours)
- ❑ BLAW 4770, Real Estate Law and Contracts (3 Hours)
- ❑ ECON 1100, Principles of Microeconomics (3 Hours)
- ❑ MGMT 3820, Management Concepts (3 Hours)
- ❑ MGMT 3850, Foundations of Entrepreneurship (3 Hours)

## TECHNICAL ELECTIVE

- ❑ Any level course chosen from appropriate elective options (3 Hours)

*Electives must be chosen from the subjects of business, engineering, mathematics, and science. Check with an advisor for appropriate technical elective course options. Suggestions include (but are not limited to):*

BUSI 1340	MKTG 2650
CSCE 1010	MKTG 3010
FINA 2770	MGMT 3330
MTSE 1100	

## MISC. Electives

- ❑ 1-2 courses (3-6 Hours) may be required to reach 120 total hours (check with advisor). 1 course may need to be chosen from Component Area options listed in mydegreeaudit.unt.edu.

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 120 Total Hours and 42 Advanced Hours. Please check with an advisor.*

# Construction Management

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 1190	Business Calculus <i>Pre-req: MATH 1100 or MATH 1180 or Test Placement 2</i>	3	F., Sp., Su.	PHYS 1420	General Physics II <i>Pre-req: PHYS 1410</i>	3	F., Sp., Su.
	PHYS 1410	General Physics I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	PHYS 1440	General Physics II Lab <i>Co/Pre-req: PHYS 1420</i>	1	F., Sp., Su.
	PHYS 1430	General Physics I Lab <i>Co/Pre-req: PHYS 1410</i>	1	F., Sp., Su.	CNET 2180	Building Construction Techniques <i>Pre-req: CNET 1160</i>	3	Sp.
	CNET 1160	Construction Methods and Materials	3	F.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	ENGR 1030	Technological Systems	3	F., Sp.	ECON 1100	Microeconomics <i>Fulfills Social and Behavioral Science Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16		Total Hours		16	

Year Two	CNET 2300	Construction Graphics and Modeling	3	F.	CNET 2200	Surveying for Construction	3	Sp.
	ENGR 2304	Statics and Strength of Materials <i>Pre-reqs: MATH 1190, PHYS 1410</i>	3	F., Su.	MGMT 3850	Foundations of Entrepreneurship	3	F., Sp., Su.
	MGMT 3820	Management Concepts	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	ACCT 2010	Accounting Principles I <i>Pre-reqs: ECON 1100, MATH 1100 or higher</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

Year Three	CNET 3150	Construction Contract Documents <i>Pre-req: CNET 2180</i>	3	F.	CNET 3190	Construction Scheduling <i>Pre-req: CNET 3160</i>	3	Sp.
	CNET 3160	Construction Cost Estimating <i>Pre-req: CNET 2180</i>	3	F.	CNET 3410	Occupational Safety and Liability	3	Sp.
	CNET 3435	Structural Analysis <i>Pre-req: ENGR 2304</i>	3	F.	CNET 3445	Steel Structures <i>Pre-req: CNET 3435</i>	3	Sp.
	BLAW 3430	Legal and Ethical Environment of Busi. <i>Pre-req: PSCI 2305, 2306</i>	3	F., Sp., Su.	CNET 3465	Soils and Foundations <i>Pre-req: CNET 2180, ENGR 2304</i>	3	Sp.
	University Core	Options at mydegreeaudit.unt.edu	3	F., Sp., Su.	BLAW 4770	Real Estate Law and Contracts	3	F., S.
	Total Hours		15		Total Hours		15	

Year Four	CNET 3485	Structural Design w/ Concrete, Timber <i>Pre-req: CNET 2180, 3435</i>	3	F.	CNET 4180	Problems in Project Management <i>Pre-req: CNET 4170</i>	3	Sp.
	CNET 4170	Construction Management <i>Pre-req: CNET 3160</i>	3	F.	CNET 4190	Quality Management in Construct. <i>Pre-req: CNET 2180</i>	3	Sp.
	CNET 4785	Senior Design I <i>Pre-req: Senior Class., CNET 3190, 3445, 3465</i>	1	F.	CNET 4795	Senior Design II <i>Pre-req: CNET 4785</i>	3	Sp.
	CNET 4630	Construct. Mgmt. for MEP Systems <i>Pre-req: CNET 2180</i>	3	F.	CNET 4920	Cooperative Education Internship <i>Pre-req: Department Consent</i>	1	Sp.
	Technical Elective	Options at mydegreeaudit.unt.edu <i>Must complete pre-reqs</i>	3	F., Sp., Su.	Misc. Elective	MISC. Elective to reach 120 Hours (If needed)	3	F., Sp., Su.
	Misc. Elective	MISC. Elective to reach 120 Hours (If needed)	3	F., Sp., Su.	Total Hours		13	
	Total Hours		16					

ENGL, TECM, MATH, PHYS, ENGR, CNET, and Business Courses require a minimum grade of "C" for completion and/or prerequisite. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Construction Management – College Algebra

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 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1190	Business Calculus <i>Pre-req: MATH 1100 or MATH 1180 or Test Placement 2</i>	3	F., Sp., Su.
	CNET 1160	Construction Methods and Materials	3	F.	CNET 2180	Building Construction Techniques <i>Pre-req: CNET 1160</i>	3	Sp.
	ENGR 1030	Technological Systems	3	F., Sp.	PHYS 1410	General Physics I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1430	General Physics I Lab <i>Co/Pre-req: PHYS 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		15		ECON 1100	Microeconomics <i>Fulfills Social and Behavioral Science Core</i>	3	F., Sp., Su.
				Total Hours		16		

Year Two	CNET 2300	Construction Graphics and Modeling	3	F.	CNET 2200	Surveying for Construction	3	Sp.
	ENGR 2304	Statics and Strength of Materials <i>Pre-reqs: MATH 1190, PHYS 1410</i>	3	F., Su.	MGMT 3820	Management Concepts	3	F., Sp., Su.
	PHYS 1420	General Physics II <i>Pre-req: PHYS 1410</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	PHYS 1440	General Physics II Lab <i>Co/Pre-req: PHYS 1420</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	ACCT 2010	Accounting Principles I <i>Pre-req: ECON 1100, MATH 1100 or higher</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		15	
	Total Hours		16					

Year Three	CNET 3150	Construction Contract Documents <i>Pre-req: CNET 2180</i>	3	F.	CNET 3190	Construction Scheduling <i>Pre-req: CNET 3160</i>	3	Sp.
	CNET 3160	Construction Cost Estimating <i>Pre-req: CNET 2180</i>	3	F.	CNET 3410	Occupational Safety and Liability	3	Sp.
	CNET 3435	Structural Analysis <i>Pre-req: ENGR 2304</i>	3	F.	CNET 3445	Steel Structures <i>Pre-req: CNET 3435</i>	3	Sp.
	BLAW 3430	Legal and Ethical Environment of Busi. <i>Pre-req: PSCI 2305, 2306</i>	3	F., Sp., Su.	CNET 3465	Soils and Foundations <i>Pre-req: CNET 2180, ENGR 2304</i>	3	Sp.
	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	CNET 4190	Quality Management in Construct. <i>Pre-req: CNET 2180</i>	3	Sp.
	Total Hours		15		Total Hours		15	

Year Four	CNET 3485	Structural Design w/ Concrete, Timber <i>Pre-req: CNET 2180, 3430</i>	3	F.	CNET 4180	Problems in Project Management <i>Pre-req: CNET 4170</i>	3	Sp.
	CNET 4170	Construction Management <i>Pre-req: CNET 3160</i>	3	F.	CNET 4795	Senior Design II <i>Pre-req: CNET 4785</i>	3	Sp.
	CNET 4785	Senior Design I <i>Pre-req: Senior Class., CNET 3190, 3445, 3465</i>	1	F.	CNET 4920	Cooperative Education Internship <i>Pre-req: Department Consent</i>	1	Sp.
	CNET 4630	Construct. Mgmt. for MEP Systems <i>Pre-req: CNET 2180</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	BLAW 4770	Real Estate Law and Contracts	3	F., Sp.	Misc. Elective	MISC. Elective to reach 120 Hours (If needed)	3	F., Sp., Su.
	Total Hours		13		Misc. Elective	MISC. Elective to reach 120 Hours (If needed)	3	F., Sp., Su.
				Total Hours		16		

ENGL, TECM, MATH, PHYS, ENGR, CNET, and Business Courses require a minimum grade of “C” for completion and/or prerequisite. This is an unofficial sample schedule. Requirements, prerequisites, corequisites, and term offerings may change. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Cybersecurity

Bachelor of Science (B.S.) degree with a major in Cybersecurity

Department of Computer Science and Engineering, DiscoveryPark (NTDP) F-201; (940) 565-2767

University Core

Major Requirements  
Grades of C or better

## COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

## AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

## AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

## FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

## STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

## CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

Major Requirements  
Grades of C or better

## TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

## MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 3680, Applied Statistics (3 Hours)

## SCIENCES - PHYSICS

- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)

## SCIENCES – BIOLOGY AND/OR CHEMISTRY

- ❑ 1 Lab science and lab chosen from list options below
- ❑ 1 Lab science and lab chosen from list options below
  - CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)
  - CHEM 1420, General Chemistry II (3 Hours) & CHEM 1440, General Chemistry II Lab (1 Hour)
  - BIOL 1710, Biology I (3 Hours)
  - BIOL 1720, Biology II (3 Hours)
  - BIOL 1760, Biology Lab (2 Hours)

## COMPUTER SCIENCE AND ENGINEERING

- ❑ CSCE 1035, Computer Programming I (4 Hours)
- ❑ CSCE 1045, Computer Programming II (3 Hours)
- ❑ CSCE 2100, Foundations of Computing (3 Hours)
- ❑ CSCE 2110, Foundations of Data Structures (3 Hours)
- ❑ CSCE 3530, Introduction to Computer Networks (3 Hours)
- ❑ CSCE 3550, Foundations of Computer Security (3 Hours)
- ❑ CSCE 3560, Computer Systems Development (3 Hours)
- ❑ CSCE 3600, Principles of Systems Programming (3 Hours)
- ❑ CSCE 4010, Social Issues in Computing (3 Hours)
- ❑ CSCE 4535, Introduction to Network Administration (3 Hours)
- ❑ CSCE 4555, Computer Forensics (3 Hours)
- ❑ CSCE 4560, Secure Electronic Commerce (3 Hours)
- ❑ CSCE 4565, Secure Software Systems (3 Hours)
- ❑ CSCE 4575, Blockchain and Applications (3 Hours)
- ❑ CSCE 4907, Cybersecurity Capstone I (3 Hours)
- ❑ CSCE 4927, Cybersecurity Capstone II (3 Hours)

## ADVANCED SUPPORTING ELECTIVES

- ❑ 1 course (3 Hours) chosen from list options below
- ❑ 1 course (3 Hours) chosen from list options below
- ❑ 1 course (3 Hours) chosen from list options below
- ❑ 1 course (3 Hours) chosen from list options below

- CSCE 4050, Applications of Cryptography (3 Hours)
- CSCE 4350, Fundamentals of Database Systems (3 Hours)
- CSCE 4357, Database Systems Security (3 Hours)
- CSCE 4520, Wireless Networks and Protocols (3 Hours)
- CSCE 4570, Information Privacy (3 Hours)
- CSCE 4600, Introduction to Operating Systems (3 Hours)
- INFO 4670, Data Analysis and Knowledge Discovery (3 Hours)
- INFO 4710, Information Technology Management (3 Hours)
- INFO 4745, Information Architecture (3 Hours)
- CJUS 3340, Computer Crime (3 Hours)
- CJUS 4330, Domestic and International Terrorism (3 Hours)

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 120 Total Hours and 42 Advanced Hours. Check with an advisor.*



# Cybersecurity – 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.	CSCE 1045	Computer Programming II <i>Pre-req: CSCE 1035, Co/Pre-req: MATH 1710</i>	3	F., Sp.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	CSCE 1035	Computer Programming I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	BIOL 1710	Biology I	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	BIOL 1760	Biology I Lab <i>Co/Pre-req: BIOL 1710</i>	2	F., Sp., Su.
	Total Hours		15		Total Hours		14	

Year Two	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3680	Applied Statistics <i>Co/Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 3600	Systems Programming <i>Pre-reqs: CSCE 2110</i>	3	F., Sp.
	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or 1045</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
Total Hours		16		Total Hours		16		

Year Three	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	CSCE 3530	Introduction to Computer Networks <i>Pre-req: CSCE 3600</i>	3	F., Sp.	CSCE 3560	Computer Systems Security <i>Pre-req: CSCE 3600</i>	3	Sp.
	CSCE 3550	Foundations of Computer Security <i>Pre-req: CSCE 2110</i>	3	F.	CSCE 4560	Secure Electronic Commerce <i>Pre-req: CSCE 2110</i>	3	Sp.
	CSCE 4010	Social Issues in Computing <i>Pre-req: CSCE 3600</i>	3	F., Sp.	CSCE 4555	Computer Forensics <i>Pre-req: CSCE 2110</i>	3	Sp.
	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
Total Hours		15		Total Hours		15		

Year Four	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	CSCE 4907	Cybersecurity Capstone I <i>Pre-req: CSCE 3550</i> <i>Co-req: CSCE 4565</i>	3	F.	CSCE 4927	Cybersecurity Capstone II <i>Pre-req: CSCE 4907</i>	3	Sp.
	CSCE 4565	Secure Software Development <i>Pre-req: CSCE 3560</i>	3	F.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	CSCE 4535	Introduction to Network Admin. <i>Pre-req: CSCE 3530</i>	3	F.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	CSCE 4575	Blockchain and Applications <i>Pre-req: CSCE 3600</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	MISC. Elective	Misc. Elective to reach 120 hours (if needed)	3	F., Sp., Su.
Total Hours		15		Total Hours		15		

ENGL, TECM, MATH, CHEM, PHYS, BIOL, and CSCE 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Cybersecurity – Pre-Calculus

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	CSCE 1035	Computer Programming I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	BIOL 1710	Biology I	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	BIOL 1760	BIOL Lab <i>Co/Pre-req: BIOL 1710</i>	2	F., Sp., Su.
	Total Hours		15		Total Hours		16	

<b>Year Two</b>	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	CSCE 1045	Computer Programming II <i>Pre-req: CSCE 1035, Co/Pre-req: MATH 1710</i>	3	F., Sp.	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16		Total Hours		16	

<b>Year Three</b>	MATH 3680	Applied Statistics <i>Co/Pre-req: MATH 1720</i>	3	F., Sp., Su.	CSCE 3530	Introduction to Computer Networks <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 3550	Foundations of Computer Security <i>Pre-req: CSCE 2110</i>	3	F.	CSCE 3560	Computer Systems Security <i>Pre-req: CSCE 3600</i>	3	Sp.
	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.	CSCE 4555	Computer Forensics <i>Pre-req: CSCE 2110</i>	3	Sp.
	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	CSCE 4560	Secure Electronic Commerce <i>Pre-req: CSCE 2110</i>	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	Total Hours		15		Total Hours		15	

<b>Year Four</b>	CSCE 4535	Introduction to Network Admin. <i>Pre-req: CSCE 3530</i>	3	F.	CSCE 4010	Social Issues in Computing <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 4565	Secure Software Development <i>Pre-req: CSCE 3560</i>	3	F.	CSCE 4927	Cybersecurity Capstone II <i>Pre-req: CSCE 4907</i>	3	Sp.
	CSCE 4575	Blockchain and Applications <i>Pre-req: CSCE 3600</i>	3	F.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	CSCE 4907	Cybersecurity Capstone I <i>Pre-req: CSCE 3550 Co-req: CSCE 4565</i>	3	F.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	University Core	Options at mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, and CSCE 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Cybersecurity – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
Year One	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

Year Two	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.
	CSCE 1035	Computer Programming I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	CSCE 1045	Computer Programming II <i>Pre-req: CSCE 1035 Co/Pre-req: MATH 1710</i>	3	F., Sp.
	BIOL 1710	Biology I	3	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	BIOL 1760	Biology Lab <i>Co/Pre-req: BIOL 1710</i>	2	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16		Total Hours		13	

Year Three	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3680	Applied Statistics <i>Co/Pre-req: MATH 1720</i>	3	F., Sp., Su.
	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.
	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	Total Hours		12	
	Total Hours		13					

Year Four	CSCE 3530	Introduction to Computer Networks <i>Pre-req: CSCE 3600</i>	3	F., Sp.	CSCE 3560	Computer Systems Security <i>Pre-req: CSCE 3600</i>	3	Sp.
	CSCE 3550	Foundations of Computer Security <i>Pre-req: CSCE 2110</i>	3	F.	CSCE 4555	Computer Forensics <i>Pre-req: CSCE 2110</i>	3	Sp.
	CSCE 4010	Social Issues in Computing <i>Pre-req: CSCE 3600</i>	3	F., Sp.	CSCE 4560	Secure Electronic Commerce <i>Pre-req: CSCE 2110</i>	3	Sp.
	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	Total Hours		12		Total Hours		12	

Year Five	CSCE 4535	Introduction to Network Admin. <i>Pre-req: CSCE 3530</i>	3	F.	CSCE 4927	Capstone II <i>Pre-req: CSCE 4907</i>	3	Sp.
	CSCE 4565	Secure Software Development <i>Pre-req: CSCE 3560</i>	3	F.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	CSCE 4575	Blockchain and Applications <i>Pre-req: CSCE 3600</i>	3	F.	Supporting Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies
	CSCE 4907	Capstone I <i>Pre-req: CSCE 3550 Co-req: CSCE 4565</i>	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, and CSCE 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Electrical Engineering

Bachelor of Science (B.S.) degree with a major in Electrical Engineering  
Department of Electrical Engineering, DiscoveryPark (NTDP) B-270; (940) 891-6872

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu  
**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## Major Requirements Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2730, Multivariable Calculus (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 3410, Differential Equations (3 Hours)
- ❑ MATH 3180, Probability for Engineers (3 Hours)

Completion of the above courses will earn a Mathematics minor.

### SCIENCES

- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)
- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)

## Major Requirements Grades of C or better

### ELECTRICAL ENGINEERING

- ❑ EENG 1910, Introduction to Electrical Engineering (3 Hours)
- ❑ EENG 2610, Circuit Analysis, (3 Hours) & EENG 2611, Circuit Analysis Lab (1 Hour)
- ❑ EENG 2620, Signals and Systems (3 Hours) & EENG 2621, Signals and Systems Lab (1 Hour)
- ❑ EENG 2710, Digital Logic Design (3 Hours) & EENG 2711, Digital Logic Design Lab (1 Hour)
- ❑ EENG 2905, Engineering Tools (3 Hours)
- ❑ EENG 2920, Analog and Digital Circuit Design (3 Hours)
- ❑ EENG 3410, Engineering Electromagnetics (3 Hours) & EENG 3411, Engineering Electromagnetics Lab (1 Hour)
- ❑ EENG 3510, Electronics I (3 Hours) & EENG 3511, Electronics I Lab (1 Hour)
- ❑ EENG 3520, Electronics II (3 Hours)
- ❑ EENG 3710, Computer Organization (3 Hours)
- ❑ EENG 3810, Communications Systems (3 Hours) & EENG 3811, Communication Systems Lab (1 Hour)
- ❑ EENG 3910, Embedded System Design Project (3 Hours)
- ❑ EENG 3920, Modern Comm. System Design (3 Hours)
- ❑ EENG 4910, Senior Design I (3 Hours)
- ❑ EENG 4990, Senior Design II (3 Hours)
- ❑ EENG 4\*\*\* Elective (3 Hours)
- ❑ EENG 4\*\*\* Elective (3 Hours)
- ❑ EENG 4\*\*\* Elective (3 Hours)
- ❑ EENG 4\*\*\* Elective (3 Hours)
- ❑ EENG 4\*\*\* Elective (3 Hours)

EENG 4\*\*\* level elective can be chose from: EENG 4010, 4310, 4330, 4340, 4350, 4410, 4710, 4760, 4810, 4850, and 4900.

EENG 4010 is a topics course and the content of 4010 varies for each semester. EENG 4010 may be repeated for credit if you do not re-take the exact same topic the 2<sup>nd</sup> time.

EENG 4920 and 4951 cannot be taken as electives.

### COMPUTER PROGRAMMING

- ❑ CSCE 1030, Computer Science I (4 Hours)

This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 128 Total Hours and 42 Advanced Hours. Check with an advisor.

# Electrical Engineering – Calculus I

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	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.
	EENG 1910	Intro to Electrical Engineering	3	F., Sp.	EENG 2710	Digital Logic Design	3	F., Sp., Su.
	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.	EENG 2711	Digital Logic Design Lab <i>Co/Pre-req: EENG 2710</i>	1	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		18		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		17	

<b>Year Two</b>	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	EENG 2620	Signals and Systems <i>Pre-reqs: EENG 2610/2611 Co/Pre-req: MATH 2730 or 3410</i>	3	F., Sp.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	EENG 2621	Signals and Systems Lab <i>Co/Pre-req: EENG 2620</i>	1	F., Sp.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	EENG 2920	Analog Circuit Design <i>Pre-reqs: EENG 1910, EENG 2610/2611, and EENG 2710/2711</i>	3	F., Sp.
	EENG 2610	Circuit Analysis <i>Co/Pre-reqs: PHYS 2220/2240, MATH 3410</i>	3	F., Sp., Su.	EENG 2905	Engineering Tools <i>Pre-reqs: CSCE 1030</i>	3	F., Sp.
	EENG 2611	Circuit Analysis Lab <i>Co/Pre-reqs: EENG 2610</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		14		Total Hours		16	

<b>Year Three</b>	MATH 3180	Probability for Engineers <i>Pre-reqs: MATH 2700 and MATH 2730</i>	3	F., Sp., Su.	EENG 3520	Electronics II <i>Pre-reqs: EENG 3510/3511</i>	3	F., Sp.
	EENG 3410	Electromagnetics <i>Pre-reqs: EENG 2610/2611</i>	3	F., Sp.	EENG 3710	Computer Organization <i>Pre-reqs: EENG 2710/2711, CSCE 1030</i>	3	F., Sp.
	EENG 3411	Electromagnetics Lab <i>Co/Pre-req: EENG 3410</i>	1	F., Sp.	EENG 3810	Communications Systems <i>Pre-reqs: EENG 2620, 3510, MATH 3180</i>	3	F., Sp.
	EENG 3510	Electronics I <i>Pre-reqs: EENG 2610/2611</i>	3	F., Sp., Su.	EENG 3811	Communications Systems Lab <i>Co/Pre-req: EENG 3810</i>	1	F., Sp.
	EENG 3511	Electronics I Lab <i>Co/Pre-req: EENG 3510</i>	1	F., Sp., Su.	EENG 3920	Modern Communications System Design <i>Pre-req: EENG 2920 Co/Pre-req: EENG 3520, 3810, 2811</i>	3	F., Sp.
	EENG 3910	Embedded System Design Project <i>Pre-reqs: EENG 2620/2621 and EENG 2920</i>	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		16	
	Total Hours		17					

<b>Year Four</b>	EENG 4910	Senior Design I <i>Pre-reqs: EENG 3810/3811, 3910, 3920</i>	3	F., Sp.	EENG 4990	Senior Design II <i>Pre-reqs: EENG 4910</i>	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CSCE, CHEM, PHYS, and EENG 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Electrical Engineering – Pre-Calculus

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650, Co-req: MATH 1710</i>	4	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	EENG 2710	Digital Logic Design	3	F., Sp., Su.
	EENG 1910	Intro to Electrical Engineering	3	F., Sp.	EENG 2711	Digital Logic Design Lab <i>Co/Pre-req: EENG 2710</i>	1	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		18		Total Hours		18	

<b>Year Two</b>	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	EENG 2905	Engineering Tools <i>Pre-req: CSCE 1030</i>	3	F., Sp.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	EENG 2610	Circuit Analysis <i>Co/Pre-reqs: PHYS 2220/2240, MATH 3410</i>	3	F., Sp., Su.
	Total Hours		16		EENG 2611	Circuit Analysis Lab <i>Co/Pre-reqs: EENG 2610</i>	1	F., Sp., Su.
				Total Hours		17		

<b>Year Three</b>	MATH 3180	Probability for Engineers <i>Pre-reqs: MATH 2700 and MATH 2730</i>	3	F., Sp.	EENG 3520	Electronics II <i>Pre-reqs: EENG 3510/3511</i>	3	F., Sp.
	EENG 2620	Signals and Systems <i>Pre-reqs: EENG 2610/2611 Co/Pre-req: MATH 2730 or 3410</i>	3	F., Sp.	EENG 3810	Communications Systems <i>Pre-reqs: EENG 2620, 3510, MATH 3180</i>	3	F., Sp.
	EENG 2621	Signals and Systems Lab <i>Co/Pre-req: EENG 2620</i>	1	F., Sp.	EENG 3811	Communications Systems Lab <i>Co/Pre-req: EENG 3810</i>	1	F., Sp.
	EENG 2920	Analog Circuit Design <i>Pre-reqs: EENG 1910, EENG 2610/2611, EENG 2710/2711</i>	3	F., Sp.	EENG 3910	Embedded System Design Project <i>Pre-reqs: EENG 2620/2621, EENG 2920</i>	3	F., Sp.
	EENG 3510	Electronics I <i>Pre-reqs: EENG 2610/2611</i>	3	F., Sp., Su.	EENG 3920	Modern Communications System Design <i>Pre-req: EENG 2920 Co/Pre-req: EENG 3520, 3810, 2811</i>	3	F., Sp.
	EENG 3511	Electronics I Lab <i>Co/Pre-req: EENG 3510</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		16	
Total Hours		17						

<b>Year Four</b>	EENG 3410	Electromagnetics <i>Pre-reqs: EENG 2610/2611</i>	3	F., Sp.	EENG 3710	Computer Organization <i>Pre-reqs: EENG 2710/2711, CSCE 1030</i>	3	F., Sp.
	EENG 3411	Electromagnetics Lab <i>Co/Pre-req: EENG 3410</i>	1	F., Sp.	EENG 4990	Senior Design II <i>Pre-reqs: EENG 4910</i>	3	F., Sp.
	EENG 4910	Senior Design I <i>Pre-reqs: EENG 3810/3811, 3910, 3920</i>	3	F., Sp.	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	Total Hours		15	
	Total Hours		16					

ENGL, TECM, MATH, CSCE, CHEM, PHYS, and EENG 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Electrical Engineering – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	EENG 1910	Intro to Electrical Engineering	3	F., Sp.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

<b>Year Two</b>	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.
	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	EENG 2710	Digital Logic Design	3	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	EENG 2711	Digital Logic Design Lab <i>Co/Pre-req: EENG 2710</i>	1	F., Sp., Su.	EENG 2905	Engineering Tools <i>Pre-req: CSCE 1030</i>	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		13	

<b>Year Three</b>	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	EENG 2620	Signals and Systems <i>Pre-reqs: EENG 2610/2611 Co/Pre-req: MATH 2730 or 3410</i>	3	F., Sp.
	EENG 2610	Circuit Analysis <i>Co/Pre-reqs: PHYS 2220/2240, MATH 3410</i>	3	F., Sp., Su.	EENG 2621	Signals and Systems Lab <i>Co/Pre-req: EENG 2620</i>	1	F., Sp.
	EENG 2611	Circuit Analysis Lab <i>Co/Pre-reqs: EENG 2610</i>	1	F., Sp., Su.	EENG 2920	Analog Circuit Design <i>Pre-reqs: EENG 1910, EENG 2610/2611, EENG 2710/2711</i>	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		13	
	Total Hours		14					

<b>Year Four</b>	MATH 3180	Probability for Engineers <i>Pre-reqs: MATH 2700 and MATH 2730</i>	3	F., Sp.	EENG 3520	Electronics II <i>Pre-reqs: EENG 3510/3511</i>	3	F., Sp.
	EENG 3410	Electromagnetics <i>Pre-reqs: EENG 2610/2611</i>	3	F., Sp.	EENG 3810	Communications Systems <i>Pre-reqs: EENG 2620, 3510, MATH 3180</i>	3	F., Sp.
	EENG 3411	Electromagnetics Lab <i>Co/Pre-req: EENG 3410</i>	1	F., Sp.	EENG 3811	Communications Systems Lab <i>Co/Pre-req: EENG 3810</i>	1	F., Sp.
	EENG 3510	Electronics I <i>Pre-reqs: EENG 2610/2611</i>	3	F., Sp., Su.	EENG 3920	Modern Communications System Design <i>Pre-req: EENG 2920 Co/Pre-req: EENG 3520, 3810, 2811</i>	3	F., Sp.
	EENG 3511	Electronics I Lab <i>Co/Pre-req: EENG 3510</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	EENG 3910	Embedded System Design Project <i>Pre-reqs: EENG 2620/2621 and EENG 2920</i>	3	F., Sp.	Total Hours		13	
	Total Hours		14					

<b>Year Five</b>	EENG 4910	Senior Design I <i>Pre-reqs: EENG 3810/3811, 3910, 3920</i>	3	F., Sp.	EENG 3710	Computer Organization <i>Pre-reqs: EENG 2710/2711, CSCE 1030</i>	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	EENG 4990	Senior Design II <i>Pre-reqs: EENG 4910</i>	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	EENG Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CSCE, CHEM, PHYS, and EENG 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Information Technology

Bachelor of Arts (B.A.) degree with a major in Information Technology

Department of Computer Science and Engineering, Discovery Park (NTDP) F-201; (940) 565-2767

University Core

Major Requirements

Grades of C or better

## COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

## AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

## AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

## FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

## STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

## CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

Major Requirements

Grades of C or better

## TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

## MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1680, Elementary Probability & Statistics (3 Hours)  
OR  
MATH 1780, Probability (3 Hours)  
OR  
MATH 3680, Applied Statistics (3 Hours)

## SCIENCES

- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)  
OR  
BIOL 1710, Biology I (3 hours) & BIOL 1760, Biology Lab (2 Hours)

## COMPUTER SCIENCE AND ENGINEERING

- ❑ CSCE 1035, Computer Programming I (4 Hours)
- ❑ CSCE 1045, Computer Programming II (3 Hours)
- ❑ CSCE 2100, Foundations of Computing (3 Hours)
- ❑ CSCE 2110, Foundations of Data Structures (3 Hours)
- ❑ CSCE 3055, IT Project Management (3 Hours)
- ❑ CSCE 3220, Human Computer Interfaces (3 Hours)
- ❑ CSCE 3420, Internet Programming (3 Hours)
- ❑ CSCE 3530, Introduction to Computer Networks (3 Hours)
- ❑ CSCE 3550, Foundations of Computer Security (3 Hours)
- ❑ CSCE 3600, Principles of Systems Programming (3 Hours)
- ❑ CSCE 3605, Systems Administration (3 Hours)
- ❑ CSCE 3615, Enterprise Systems Arch., Analysis and Design (3 Hours)
- ❑ CSCE 4010, Social Issues in Computing (3 Hours)
- ❑ CSCE 4350, Fundamentals of Database Systems (3 Hours)
- ❑ CSCE 4355, Database Administration (3 Hours)
- ❑ CSCE 4535, Network Administration (3 Hours)
- ❑ CSCE 4905, Information Technology Capstone I (3 Hours)
- ❑ CSCE 4925, Information Technology Capstone II (3 Hours)

## SUPPORTING AREA

- ❑ Course approved by an advisor (3 Hours)
- ❑ Course approved by an advisor (3 Hours)
- ❑ Course approved by an advisor (3 Hours)
- ❑ Course approved by an advisor (3 Hours)
- ❑ Course approved by an advisor (3 Hours)
- ❑ Course approved by an advisor (3 Hours)
- ❑ Course approved by an advisor (3 Hours)

You must choose a supporting area (21 Hours) and complete approved courses. Check with your advisor concerning approved classes. Suggestions include, but are not limited to:

Security/Networking	Criminal Justice
Location Intelligence	Music or Theater Technologies
Geog. Info Systems	Legal Studies
Data Science	Education/Teach North Texas
Web Development	Pre-MBA Business
Game Development	General Business
Project Management	Management
Technical Communications	Marketing, Entrepreneurship
Microsoft/Oracle/Cisco Cert.	Logistics/Decision Sciences
Information Systems	Urban Planning
Graphic/Communications Design	

Completion of CSCE 2610, CSCE 4560, & CSCE 4600 toward a Supporting Area in Security/Networking also earns a Security Certificate from the National Security Agency/ Department of Homeland Security. CSCE 2610 requires EENG 2710 as prerequisite.

A maximum of 6 hours may be taken for the Supporting Area from CSCE 4890, 4920, 4930, 4940, or 4950.

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 121 Total Hours and 42 Advanced Hours. Check with an advisor.*



# Information 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.	CSCE 1045	Computer Programming II <i>Pre-req: CSCE 1030 Co/Pre-req: MATH 1710</i>	3	F., Sp.
	CHEM 1410 or BIOL 1710	General Chemistry I or Biology I <i>Pre-req for CHEM 1410: MATH 1100 or higher Pre-req for BIOL 1710: none</i>	3	F., Sp., Su.	MATH 1680	Element. Probability and Statistics <i>Pre-req: TSI Math Complete</i>	3	F., Sp., Su.
	CHEM 1430 or BIOL 1760	General Chemistry I Lab or Biology I Lab <i>Co/Pre-req for CHEM 1430: CHEM 1410 Co/Pre-req for BIOL 1760: BIOL 1710</i>	1-2	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	CSCE 1035	Computer Programming I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
Total Hours		15-16		Total Hours		15		

Year Two	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	CSCE 3615	Enterprise Systems Architecture <i>Pre-req: CSCE 2100</i>	3	Sp.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		15	
Total Hours		16						

Year Three	CSCE 3055	IT Project Management <i>Pre-req: CSCE 2100</i>	3	F.	CSCE 3530	Introduction to Computer Networks <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 3220	Human Computer Interfaces <i>Pre-req: CSCE 2100, 2110</i>	3	F.	CSCE 4010	Social Issues <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 3420	Internet Programming <i>Pre-req: CSCE 2100, 2110</i>	3	F.	CSCE 4350	Database Systems <i>Pre-reqs: CSCE 2100, 2110</i>	3	F., Sp.
	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Total Hours		15		Total Hours		15	

Year Four	CSCE 3550	Foundations of Computer Security <i>Pre-req: CSCE 2110</i>	3	F.	CSCE 4925	Capstone II <i>Pre-req: CSCE 4905</i>	3	Sp.
	CSCE 4355	Database Administration <i>Pre-req: CSCE 4350</i>	3	F.	CSCE 3605	Systems Administration <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 4535	Network Administration <i>Pre-req: CSCE 3530</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	CSCE 4905	Capstone I <i>Pre-reqs: CSCE 3055, 3615</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.	Misc. Elective	MISC. Elective to reach 121 Hours or Component Area Core (If needed)	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, CSCE and Supporting Area 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Information Technology – Pre-Calculus

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410 or BIOL 1710	General Chemistry I or Biology I <i>Pre-req for CHEM 1410: MATH 1100 or higher</i> <i>Pre-req for BIOL 1710: none</i>	3	F., Sp., Su.	CSCE 1035	Computer Programming I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.
	CHEM 1430 or BIOL 1760	General Chemistry I Lab or Biology I Lab <i>Co/Pre-req for CHEM 1430: CHEM 1410</i> <i>Co/Pre-req for BIOL 1760: BIOL 1710</i>	1-2	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15-16		Total Hours		17	

<b>Year Two</b>	MATH 1680	Elementary Probability and Statistics <i>Pre-req: TSI Math Complete</i>	3	F., Sp., Su.	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	CSCE 1045	Computer Programming II <i>Pre-req: CSCE 1035 Co/Pre-req: MATH 1710</i>	3	F., Sp.	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp.	University Core	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp., Su.
	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	Varies	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		15	
	Total Hours		16					

<b>Year Three</b>	CSCE 3055	IT Project Management <i>Pre-req: CSCE 2100</i>	3	F.	CSCE 3530	Introduction to Computer Networks <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 3220	Human Computer Interfaces <i>Pre-req: CSCE 2100, 2110</i>	3	F.	CSCE 3605	Systems Administration <i>Pre-req: CSCE 3600</i>	3	Sp.
	CSCE 3420	Internet Programming <i>Pre-req: CSCE 2100, 2110</i>	3	F.	CSCE 3615	Enterprise Systems Architecture <i>Pre-req: CSCE 2100</i>	3	Sp.
	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.	CSCE 4350	Database Systems <i>Pre-req: CSCE 2100, 2110</i>	3	F., Sp.
	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Total Hours		15		Total Hours		15	

<b>Year Four</b>	CSCE 3550	Foundations of Computer Security <i>Pre-req: CSCE 2110</i>	3	F.	CSCE 4010	Social Issues <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 4355	Database Administration <i>Pre-req: CSCE 4350</i>	3	F.	CSCE 4925	Capstone II <i>Pre-req: CSCE 4905</i>	3	Sp.
	CSCE 4535	Network Administration <i>Pre-req: CSCE 3530</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	CSCE 4905	Capstone I <i>Pre-reqs: CSCE 3055, 3615</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Total Hours		15		Total Hours		15	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, CSCE and Supporting Area 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Information Technology – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
<b>Year One</b>	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100 or Test Placement</i>	5	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1410 or BIOL 1710	General Chemistry I or Biology I <i>Pre-req for CHEM 1410: MATH 1100</i> <i>Pre-req for BIOL 1710: none</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	1	F., Sp., Su.	CHEM 1430 or BIOL 1760	General Chemistry I Lab or Biology I Lab <i>Co/Pre-req for CHEM 1430: CHEM 1410</i> <i>Co/Pre-req for BIOL 1760: BIOL 1710</i>	1-2	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		12-13	

<b>Year Two</b>	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.	MATH 1680	Elementary Probability and Statistics <i>Pre-req: TSI Math Complete</i>	3	F., Sp., Su.
	CSCE 1035	Computer Programming I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.	CSCE 1045	Computer Programming II <i>Pre-req: CSCE 1035 Co/Pre-req: MATH 1710</i>	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	Total Hours		14		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		13	

<b>Year Three</b>	CSCE 2100	Foundations of Computing <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp.	CSCE 3600	Systems Programming <i>Pre-req: CSCE 2110</i>	3	F., Sp.
	CSCE 2110	Foundations of Data Structures <i>Pre-req: CSCE 1040 or CSCE 1045</i>	3	F., Sp., Su.	CSCE 3615	Enterprise Systems Architecture <i>Pre-req: CSCE 2100</i>	3	Sp.
	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

<b>Year Four</b>	CSCE 3055	IT Project Management <i>Pre-req: CSCE 2100</i>	3	F.	CSCE 3605	Systems Administration <i>Pre-req: CSCE 3600</i>	3	Sp.
	CSCE 3220	Human Computer Interfaces <i>Pre-req: CSCE 2100, 2110</i>	3	F.	CSCE 4010	Social Issues <i>Pre-req: CSCE 3600</i>	3	F., Sp.
	CSCE 3420	Internet Programming <i>Pre-req: CSCE 2100, 2110</i>	3	F.	CSCE 4350	Database Systems <i>Pre-reqs: CSCE 2100, 2110</i>	3	F., Sp.
	CSCE 3530	Introduction to Computer Networks <i>Pre-req: CSCE 3600</i>	3	F., Sp.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Total Hours		12		Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
					Total Hours		15	

<b>Year Five</b>	CSCE 3550	Foundations of Computer Security <i>Pre-req: CSCE 2110</i>	3	F.	CSCE 4925	Capstone II <i>Pre-req: CSCE 4905</i>	3	Sp.
	CSCE 4355	Database Administration <i>Pre-req: CSCE 4350</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	CSCE 4535	Network Administration <i>Pre-req: CSCE 3530</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	CSCE 4905	Capstone I <i>Pre-reqs: CSCE 3055, 3615</i>	3	F.	Supporting Area	Options via mydegreeaudit.unt.edu or your advisor	3	F., Sp.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, PHYS, BIOL, CSCE and Supporting Area 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Materials Science and Engineering

Bachelor of Science (B.S.) degree with a major in Materials Science and Engineering  
Department of Materials Science and Engineering, DiscoveryPark (NTDP) E-132; (940) 565-3260

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## Major Requirements Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2730, Multivariable Calculus (3 Hours)
- ❑ MATH 3410, Differential Equations (3 Hours)

## Major Requirements Grades of C or better

### SCIENCES

- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)
- ❑ CHEM 1420, General Chemistry II (3 Hours)
- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)

### MATERIALS SCIENCE AND ENGINEERING

- ❑ ENGR 2301, Statics (3 Hours)
- ❑ MTSE 1100, Discover How and Why Materials Matter (3 Hours)
- ❑ MTSE 3000, Fundamentals of Materials Science and Engr. I (3 Hours)
- ❑ MTSE 3001, Fundamentals of Materials Science and Engr. II (3 Hours)
- ❑ MTSE 3010, Bonding and Structure (3 Hours)
- ❑ MTSE 3020, Microstructure and Characterization (3 Hours)
- ❑ MTSE 3030, Thermodynamics and Phase Diagrams (3 Hours)
- ❑ MTSE 3040, Transport Phenomena (3 Hours)
- ❑ MTSE 3050, Mechanical Properties (3 Hours)
- ❑ MTSE 3060, Phase Transformations (3 Hours)
- ❑ MTSE 3070, Electrical, Optical, and Magnetic Properties (3 Hours)
- ❑ MTSE 3080, Materials Processing (3 Hours)
- ❑ MTSE 3090, Laboratory I (1 Hour)
- ❑ MTSE 3100, Laboratory II (1 Hour)
- ❑ MTSE 3110, Materials Aspects of Quantum Materials (3 Hours)
- ❑ MTSE 4010, Physical Metallurgy Principles (3 Hours)
- ❑ MTSE 4030, Ceramic Science and Engineering (3 Hours)
- ❑ MTSE 4050, Polymer Science and Engineering (3 Hours)
- ❑ MTSE 4060, Materials Selection and Performance (3 Hours)
- ❑ MTSE 4090, Senior Design I (3 Hours)
- ❑ MTSE 4100, Senior Design II (3 Hours)

### MATERIALS SCIENCE AND ENGINEERING ELECTIVES

- ❑ 1 MTSE 4\*\*\* elective (3 Hours) chosen from list options below
- ❑ 1 MTSE 4\*\*\* elective (3 Hours) chosen from list options below

MTSE 4020, Materials in Medicine (3 Hours)  
MTSE 4040, Computational Materials Science (3 Hours)  
MTSE 4070, Electronic Materials (3 Hours)

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 120 Total Hours and 42 Advanced Hours. Check with an advisor.*

# Materials Science and Engineering – 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.
	MTSE 1100	Discover How and Why Materials Matter	3	F.	CHEM 1420	General Chemistry II <i>Pre-req: CHEM 1410, 1430</i>	3	F., Sp.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Total Hours		14		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		16	

Year Two	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	MTSE 3001	Fundamentals II <i>Co/Pre-req: MTSE 3000</i>	3	F., Sp.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	MTSE 3110	Quantum Materials <i>Pre-req: MTSE 3000, PHYS 2220</i>	3	Sp.
	MTSE 3000	Fundamentals I <i>Pre-req: CHEM 1410, 1430</i>	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	ENGR 2301	Statics <i>Pre-reqs: MATH 1710, PHYS 1710, 1730</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		15	
	Total Hours		16					

Year Three	MTSE 3010	Bonding and Structure <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3050	Mechanical Properties <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 3020	Microstructure and Characterization <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3060	Phase Transformations <i>Pre-req: MTSE 3010, 3030, 3040</i>	3	Sp.
	MTSE 3030	Thermodynamics and Phase Diagrams <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3070	Elect., Optical, Magnetic Properties <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 3040	Transport Phenomena <i>Pre-req: MTSE 3000, MATH 3410</i>	3	F.	MTSE 3080	Materials Processing <i>Pre-req: MTSE 3040</i>	3	Sp.
	MTSE 3090	Laboratory I <i>Pre-req: MTSE 3000</i>	1	F.	MTSE 3100	Laboratory II <i>Pre-req: MTSE 3090</i>	1	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16		Total Hours		16	

Year Four	MTSE 4010	Physical Metallurgy Principles <i>Pre-reqs: MTSE 3010, 3030, 3040</i>	3	F.	MTSE 4050	Polymer Science and Engineering <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 4030	Ceramic Science and Engineering <i>Pre-reqs: MTSE 3010, 3020, 3040</i>	3	F.	MTSE 4100	Senior Design II <i>Pre-req: MTSE 4090</i>	3	Sp.
	MTSE 4060	Selection and Performance <i>Pre-reqs: MTSE 3030, 3040, 3050</i>	3	F.	MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070 Must complete pre-reqs	3	Sp.
	MTSE 4090	Senior Design I <i>Pre-reqs: MTSE 3010, 3020, 3030, 3040, 3050, 3070, 3080</i>	3	F.	MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070 Must complete pre-reqs	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		12	
	Total Hours		15					

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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Materials Science and Engineering – Pre-Calculus

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 1650	Pre-Calculus <i>Pre-req: MATH 1100, 1600 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	CHEM 1420	General Chemistry II <i>Pre-req: CHEM 1410, 1430</i>	3	F., Sp., Su.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	MTSE 1100	Discover How and Why Materials Matter	3	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		16	

Year Two	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	MTSE 3000	Fundamentals I <i>Pre-req: CHEM 1410, 1430</i>	3	F., Sp.	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	MTSE 3001	Fundamentals II <i>Co/Pre-req: MTSE 3000</i>	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	ENGR 2301	Statics <i>Pre-reqs: MATH 1710, PHYS 1710, 1730</i>	3	F., Sp., Su.
	Total Hours		16		Total Hours		16	

Year Three	MTSE 3010	Bonding and Structure <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3050	Mechanical Properties <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 3020	Microstructure and Characterization <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3060	Phase Transformations <i>Pre-req: MTSE 3010, 3030, 3040</i>	3	Sp.
	MTSE 3030	Thermodynamics and Phase Diagrams <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3070	Elect., Optical, Magnetic Properties <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 3040	Transport Phenomena <i>Pre-req: MTSE 3000, MATH 3410</i>	3	F.	MTSE 3080	Materials Processing <i>Pre-req: MTSE 3040</i>	3	Sp.
	MTSE 3090	Laboratory I <i>Pre-req: MTSE 3000</i>	1	F.	MTSE 3100	Laboratory II <i>Pre-req: MTSE 3090</i>	1	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	MTSE 3110	Quantum Materials <i>Pre-req: MTSE 3000, PHYS 2220</i>	3	F., Sp.
	Total Hours		16		Total Hours		16	

Year Four	MTSE 4010	Physical Metallurgy Principles <i>Pre-reqs: MTSE 3010, 3030, 3040</i>	3	F.	MTSE 4050	Polymer Science and Engineering <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 4030	Ceramic Science and Engineering <i>Pre-reqs: MTSE 3010, 3020, 3040</i>	3	F.	MTSE 4100	Senior Design II <i>Pre-req: MTSE 4090</i>	3	Sp.
	MTSE 4060	Selection and Performance <i>Pre-reqs: MTSE 3030, 3040, 3050</i>	3	F.	MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070 Must complete pre-reqs	3	Sp.
	MTSE 4090	Senior Design I <i>Pre-reqs: MTSE 3010, 3020, 3030, 3040, 3050, 3070, 3080</i>	3	F.	MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070 Must complete pre-reqs	3	Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Materials Science and Engineering – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

Year One	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100, 1600 or Test Placement</i>	5	F., Sp., Su.
	MTSE 1100	Discover How and Why Materials Matter	3	F.	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		12	
Total Hours		15						

Year Two	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 1420	General Chemistry II <i>Pre-req: CHEM 1410, 1430</i>	3	F., Sp., Su.	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.
	MTSE 3000	Fundamentals I <i>Pre-req: CHEM 1410, 1430</i>	3	F., Sp.	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	MTSE 3001	Fundamentals II <i>Co/Pre-req: MTSE 3000</i>	3	Sp.
	Total Hours		13		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		13	

Year Three	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	MTSE 3110	Quantum Materials <i>Pre-req: MTSE 3000, PHYS 2220</i>	3	F., Sp.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	MTSE 3050	Mechanical Properties <i>Pre-req: MTSE 3000</i>	3	Sp.
	ENGR 2301	Statics <i>Pre-reqs: MATH 1710, PHYS 1710, 1730</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		12	
	Total Hours		13					

Year Four	MTSE 3010	Bonding and Structure <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3060	Phase Transformations <i>Pre-req: MTSE 3010, 3030, 3040</i>	3	Sp.
	MTSE 3020	Microstructure and Characterization <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3070	Elect., Optical, Magnetic Properties <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 3030	Thermodynamics and Phase Diagrams <i>Pre-req: MTSE 3000</i>	3	F.	MTSE 3080	Materials Processing <i>Pre-req: MTSE 3040</i>	3	Sp.
	MTSE 3040	Transport Phenomena <i>Pre-req: MTSE 3000, MATH 3410</i>	3	F.	MTSE 3100	Laboratory II <i>Pre-req: MTSE 3090</i>	1	Sp.
	MTSE 3090	Laboratory I <i>Pre-req: MTSE 3000</i>	1	F.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		13		Total Hours		13	

Year Five	MTSE 4010	Physical Metallurgy Principles <i>Pre-reqs: MTSE 3010, 3030, 3040</i>	3	F.	MTSE 4050	Polymer Science and Engineering <i>Pre-req: MTSE 3000</i>	3	Sp.
	MTSE 4030	Ceramic Science and Engineering <i>Pre-reqs: MTSE 3010, 3020, 3040</i>	3	F.	MTSE 4100	Senior Design II <i>Pre-req: MTSE 4090</i>	3	Sp.
	MTSE 4060	Selection and Performance <i>Pre-reqs: MTSE 3030, 3040, 3050</i>	3	F.	MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070 Must complete pre-reqs	3	Sp.
	MTSE 4090	Senior Design I <i>Pre-reqs: MTSE 3010, 3020, 3030, 3040, 3050, 3070, 3080</i>	3	F.	MTSE Elective	MTSE 4020 or MTSE 4040 or MTSE 4070 Must complete pre-reqs	3	Sp.
	Total Hours		12		Total Hours		12	

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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Mechanical and Energy Engineering

Bachelor of Science (B.S.) degree with a major in Mechanical and Energy Engineering

Department of Mechanical Engineering, DiscoveryPark (NTDP) F-101; (940) 565-2400

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## Major Requirements Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)
- ❑ MATH 2700, Linear Algebra (3 Hours)
- ❑ MATH 2730, Multivariable Calculus (3 Hours)
- ❑ MATH 3410, Differential Equations (3 Hours)

### SCIENCES

- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)
- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)

## Major Requirements Grades of C or better

### MECHANICAL AND ENERGY ENGINEERING

- ❑ MEEN 1000, Discover Mechanical and Energy (2 Hours)
- ❑ MEEN 2110, Engineering Data Analysis (3 Hours)
- ❑ MEEN 2210, Thermodynamics I (3 Hours)
- ❑ MEEN 2240, Programming for Mechanical Engr. (3 Hours)
- ❑ ENGR 2301, Statics (3 Hours)
- ❑ ENGR 2302, Dynamics (3 Hours)
- ❑ ENGR 2332, Mechanics of Materials (3 Hours)
- ❑ MEEN 3100, Manufacturing Processes (3 Hours)
- ❑ MEEN 3110, Thermodynamics II (3 Hours)
- ❑ MEEN 3120, Fluid Mechanics (3 Hours)
- ❑ MEEN 3130, Machine Elements (3 Hours)
- ❑ MEEN 3210, Heat Transfer (3 Hours)
- ❑ MEEN 3230, System Dynamics and Controls (3 Hours)
- ❑ MEEN 3240, Laboratory I (2 Hours)
- ❑ MEEN 3242, Laboratory II (1 Hour)
- ❑ MEEN 3250, Analytical Methods (3 Hours)
- ❑ MEEN 4150, Design I (3 Hours)
- ❑ MEEN 4250, Capstone Design (3 Hours)
  
- ❑ ENGR 1304, Engineering Graphics (3 Hours)
- ❑ EENG 2610, Circuit Analysis (3 Hours)
- ❑ ENGR 3450, Engineering Materials (4 Hours)

### ENERGY ELECTIVES

- ❑ 1 Energy Elective course (3 Hours) chosen from list below
- ❑ 1 Energy Elective course (3 Hours) chosen from list below

MEEN 3125	MEEN 4310	MEEN 4332	MEEN 4410
MEEN 4110	MEEN 4315	MEEN 4335	MEEN 4810
MEEN 4112	MEEN 4320	MEEN 4340	
MEEN 4300	MEEN 4330	MEEN 4350	

### TECHNICAL ELECTIVES

- ❑ 1 Technical Elective course (3 Hours) chosen from list below
- ❑ 1 Technical Elective course (3 Hours) chosen from list below

MEEN 4120	MEEN 4152	MEEN 4500	MEEN 4800
MEEN 4130	MEEN 4160	MEEN 4510	MEEN 4920
MEEN 4140	MEEN 4415	MEEN 4750	MEEN 4930
MEEN 4151	MEEN 4488	MEEN 4760	MFET 4190

*This is an unofficial simplified checklist effective fall 2023. Degree requirements may change. You may need elective courses to help reach a minimum of 127 Total Hours and 42 Advanced Hours. Check with an advisor.*



# Mechanical and Energy Engineering – Calculus I

2023-2024 Catalog: Sample Four-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
Year One	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.
	MEEN 1000	Discover Mechanical & Energy <i>Pre-req: MATH 1650</i>	2	F., Sp.	ENGR 1304	Engineering Graphics	3	F., Sp.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		16				16	

Year Two	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	MEEN 2210	Thermodynamics I <i>Pre-reqs: MEEN 1000, MATH 1720, &amp; PHYS 1710</i>	3	F., Sp., Su.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	ENGR 2302	Dynamics <i>Pre-reqs: ENGR 2301 &amp; MATH 1720</i>	3	F., Sp., Su.
	ENGR 2301	Statics <i>Pre-req: PHYS 1710/1730</i>	3	F., Sp., Su.	ENGR 2332	Mechanics of Materials <i>Pre-req: ENGR 2301</i>	3	F., Sp., Su.
	MEEN 2240	Programming for Mechanical Engineers <i>Pre-req: MEEN 1000, Co-req MATH 2700</i>	3	F., Sp.	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720</i> <i>Co/Pre-req: PHYS 2220/2240</i>	3	F., Sp., Su.
	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MEEN 2110	Engineering Data Analysis <i>Pre-reqs: MATH 2700 &amp; MEEN 1000</i>	3	F., Sp.
	Total Hours		16				18	

Year Three	MEEN 3110	Thermodynamics II <i>Pre-req: MEEN 2210</i>	3	F., Sp., Su.	MEEN 3130	Machine Elements <i>Pre-reqs: ENGR 2332 &amp; ENGR 1304</i>	3	F., Sp., Su.
	MEEN 3120	Fluid Mechanics <i>Pre-reqs: MATH 2730, 3410, MEEN 2210, 2332</i>	3	F., Sp., Su.	MEEN 3210	Heat Transfer <i>Pre-reqs: MEEN 3110, 3120, 3250</i>	3	F., Sp., Su.
	MEEN 3240	Laboratory I <i>Pre-reqs: MEEN 2110, 2210, &amp; MATH 3410</i>	2	F., Sp.	MEEN 3230	Dynamics and Controls <i>Pre-reqs: ENGR 2302, MATH 2700, 3410</i>	3	F., Sp., Su.
	MEEN 3250	Analytical Methods <i>Pre-reqs: MEEN 2240 &amp; MATH 3410</i>	3	F., Sp., Su.	MEEN 3242	Laboratory II <i>Pre-reqs: MEEN 3240 &amp; 3120, Co/Pre-req: MEEN 3210</i>	1	F., Sp.
	ENGR 3450	Engineering Materials <i>Pre-req: PHYS 1710, CHEM 1410/1430, ENGR 2332</i>	4	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		16	

Year Four	MEEN 3100	Manufacturing Processes <i>Pre-reqs: ENGR 2332 and 3450</i>	3	F., Sp.	MEEN 4250	Capstone Design <i>Pre-req: MEEN 3100 &amp; 4150</i>	3	F., Sp.
	MEEN 4150	Design I <i>Pre-reqs: EENG 2610, MEEN 3130, 3210, 3230, &amp; 3242 Co/Pre-req: MEEN 3100</i>	3	F., Sp.	Energy Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Energy Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15				15	

ENGL, TECM, MATH, CHEM, PHYS, EENG, ENGR, and MEEN 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Mechanical and Energy Engineering – Pre-Calculus

2023-2024 Catalog: Sample Five-Year Schedule

Year One	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100, 1600 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
	CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	MEEN 1000	Discover Mechanical & Energy <i>Pre-req: MATH 1650</i>	2	F., Sp.
	CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		15	

Year Two	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	MEEN 2240	Programming for Mechanical Engineers <i>Pre-req: MEEN 1000, Co-req MATH 2700</i>	3	F., Sp.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	ENGR 2301	Statics <i>Pre-req: PHYS 1710/1730, MEEN 1000</i>	3	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	ENGR 1304	Engineering Graphics	3	F., Sp.	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.
	Total Hours		13		PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.
					Total Hours		16	

Year Three	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MEEN 2110	Engineering Data Analysis <i>Pre-reqs: MATH 2700 &amp; MEEN 1000</i>	3	F., Sp.
	MEEN 2210	Thermodynamics I <i>Pre-reqs: MEEN 1000, MATH 1720, PHYS 1710</i>	3	F., Sp., Su.	MEEN 3110	Thermodynamics II <i>Pre-req: MEEN 2210</i>	3	F., Sp., Su.
	ENGR 2302	Dynamics <i>Pre-reqs: ENGR 2301 &amp; MATH 1720</i>	3	F., Sp., Su.	ENGR 3450	Engineering Materials <i>Pre-req: PHYS 1710, CHEM 1410/1430, ENGR 2332</i>	4	F., Sp.
	ENGR 2332	Mechanics of Materials <i>Pre-req: ENGR 2301</i>	3	F., Sp., Su.	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720 Co/Pre-req: PHYS 2220/2240</i>	3	F., Sp., Su.
	Total Hours		12		Total Hours		13	

Year Four	MEEN 3120	Fluid Mechanics <i>Pre-reqs: MATH 2730, 3410, MEEN 2210, 2332</i>	3	F., Sp., Su.	MEEN 3130	Machine Elements <i>Pre-reqs: ENGR 2332 &amp; ENGR 1304</i>	3	F., Sp., Su.
	MEEN 3240	Laboratory I <i>Pre-reqs: MEEN 2110, 2210, &amp; MATH 3410</i>	2	F., Sp.	MEEN 3210	Heat Transfer <i>Pre-reqs: MEEN 3110, 3120, 3250</i>	3	F., Sp., Su.
	MEEN 3250	Analytical Methods <i>Pre-reqs: MEEN 2240 &amp; MATH 3410</i>	3	F., Sp., Su.	MEEN 3230	Dynamics and Controls <i>Pre-reqs: ENGR 2302, MATH 2700, 3410</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	MEEN 3242	Laboratory II <i>Pre-reqs: MEEN 3240 &amp; 3120, Co/Pre-req: MEEN 3210</i>	1	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		15		Total Hours		13	

Year Five	MEEN 3100	Manufacturing Processes <i>Pre-reqs: ENGR 2332 and 3450</i>	3	F., Sp.	MEEN 4250	Capstone Design <i>Pre-req: MEEN 3100 &amp; 4150</i>	3	F., Sp.
	MEEN 4150	Design I <i>Pre-reqs: EENG 2610, MEEN 3130, 3210, 3230, &amp; 3242 Co/Pre-req: MEEN 3100</i>	3	F., Sp.	Energy Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Energy Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	Total Hours		9	
	Total Hours		12					

ENGL, TECM, MATH, CHEM, PHYS, EENG, ENGR, and MEEN 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Mechanical and Energy Engineering – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

Year One	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100, 1600 or Test Placement</i>	5	F., Sp., Su.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		14	

Year Two	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.
	MEEN 1000	Discover Mechanical & Energy <i>Pre-req: MATH 1650</i>	2	F., Sp.	ENGR 1304	Engineering Graphics	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
Total Hours		13		Total Hours		13		

Year Three	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MEEN 2240	Programming for Mechanical Engineers <i>Pre-req: MEEN 1000, Co-req MATH 2700</i>	3	F., Sp.	MATH 3410	Differential Equations <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.
	ENGR 2301	Statics <i>Pre-req: PHYS 1710/1730, MEEN 1000</i>	3	F., Sp., Su.	MEEN 2110	Engineering Data Analysis <i>Pre-reqs: MATH 2700 &amp; MEEN 1000</i>	3	F., Sp.
	MATH 2700	Linear Algebra <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	MEEN 2210	Thermodynamics I <i>Pre-reqs: MEEN 1000, MATH 1720, &amp; PHYS 1710</i>	3	F., Sp., Su.
	MATH 2730	Multivariable Calculus <i>Pre-req: MATH 1720</i>	3	F., Sp., Su.	ENGR 2302	Dynamics <i>Pre-reqs: ENGR 2301 &amp; MATH 1720</i>	3	F., Sp., Su.
	PHYS 2220	Electricity & Magnetism <i>Pre-reqs: MATH 1720 &amp; PHYS 1710/1730</i>	3	F., Sp., Su.	ENGR 2332	Mechanics of Materials <i>Pre-req: ENGR 2301</i>	3	F., Sp., Su.
	PHYS 2240	Electricity & Magnetism Lab <i>Co/Pre-req: PHYS 2220</i>	1	F., Sp., Su.	Total Hours		15	
Total Hours		16						

Year Four	MEEN 3110	Thermodynamics II <i>Pre-req: MEEN 2210</i>	3	F., Sp., Su.	MEEN 3130	Machine Elements <i>Pre-reqs: ENGR 2332 &amp; ENGR 1304</i>	3	F., Sp., Su.
	MEEN 3120	Fluid Mechanics <i>Pre-reqs: MATH 2730, 3410, MEEN 2210, 2332</i>	3	F., Sp., Su.	MEEN 3210	Heat Transfer <i>Pre-reqs: MEEN 3110, 3120, 3250</i>	3	F., Sp., Su.
	MEEN 3240	Laboratory I <i>Pre-reqs: MEEN 2110, 2210, &amp; MATH 3410</i>	2	F., Sp.	MEEN 3230	Dynamics and Controls <i>Pre-reqs: ENGR 2302, MATH 2700, 3410</i>	3	F., Sp., Su.
	ENGR 3450	Engineering Materials <i>Pre-req: PHYS 1710, CHEM 1410/1430, ENGR 2332</i>	4	F., Sp.	MEEN 3242	Laboratory II <i>Pre-reqs: MEEN 3240 &amp; 3120, Co/Pre-req: MEEN 3210</i>	1	F., Sp.
	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720 Co/Pre-req: PHYS 2220/2240</i>	3	F., Sp., Su.	MEEN 3250	Analytical Methods <i>Pre-reqs: MEEN 2240 &amp; MATH 3410</i>	3	F., Sp., Su.
	Total Hours		15		Total Hours		13	

Year Five	MEEN 3100	Manufacturing Processes <i>Pre-reqs: ENGR 2332 and 3450</i>	3	F., Sp.	MEEN 4250	Capstone Design <i>Pre-req: MEEN 3100 &amp; 4150</i>	3	F., Sp.
	MEEN 4150	Design I <i>Pre-reqs: EENG 2610, MEEN 3130, 3210, 3230, &amp; 3242 Co/Pre-req: MEEN 3100</i>	3	F., Sp.	Energy Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Energy Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.
	Technical Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		12		Total Hours		12	

ENGL, TECM, MATH, CHEM, PHYS, EENG, ENGR, and MEEN 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Mechanical Engineering Technology

Bachelor of Science in Engineering Technology (B.S.E.T) degree with a major in Mechanical Engineering Technology  
Department of Mechanical Engineering, DiscoveryPark (NTDP) F-115; (940) 565-2400

## University Core

### COMMUNICATION

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu  
**Grade of “C” or better is required**

### AMERICAN HISTORY I

- ❑ 1 Course (3 Hours) chosen from HIST 2610 or HIST 2675

### AMERICAN HISTORY II

- ❑ 1 Course (3 Hours) chosen from HIST 2620 or HIST 2685

### FEDERAL GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2305 or PSCI 2315

### STATE GOVERNMENT/POLITICAL SCIENCE

- ❑ 1 Course (3 Hours) chosen from PSCI 2306 or PSCI 2316

### CREATIVE ARTS

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### LANGUAGE, PHILOSOPHY, AND CULTURE

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

### SOCIAL AND BEHAVIORAL SCIENCES

- ❑ 1 Course (3 Hours) – see mydegreeaudit.unt.edu

## Major Requirements Grades of C or better

### TECHNICAL COMMUNICATIONS

- ❑ TECM 2700, Technical Writing (3 Hours)

### MATHEMATICS

- ❑ MATH 1710, Calculus I (4 Hours)
- ❑ MATH 1720, Calculus II (3 Hours)

### SCIENCES

- ❑ PHYS 1710, Mechanics (3 Hours) & PHYS 1730 Mechanics Lab (1 Hour)
- ❑ PHYS 2220, Electricity & Magnetism (3 Hours) & PHYS 2240, Electricity & Magnetism Lab (1 Hour)
- ❑ CHEM 1410, General Chemistry I (3 Hours) & CHEM 1430, General Chemistry I Lab (1 Hour)

### COMPUTER PROGRAMMING

- ❑ CSCE 1030, Computer Science I (4 Hours)

## Major Requirements Grades of C or better

### MECHANICAL ENGINEERING TECHNOLOGY

- ❑ ENGR 1030, Technological Systems (3 Hours)
- ❑ ENGR 1304, Engineering Graphics (3 Hours)
- ❑ ENGR 2301, Statics (3 Hours)
- ❑ ENGR 2302, Dynamics (3 Hours)
- ❑ ENGR 2332, Mechanics of Materials (3 Hours)
- ❑ EENG 2610, Circuit Analysis (3 Hours) & EENG 2611, Circuit Analysis Lab (1 Hour)
- ❑ ENGR 3450, Engineering Materials (4 Hours)
  
- ❑ MEET 3550, Geometrical Dimensions & Tolerancing (3 hours)
- ❑ MEET 3650, Design of Mechanical Components (3 Hours)
- ❑ MEET 3940, Fluid Mechanics Applications (3 Hours)
- ❑ MEET 3980, Digital Control of Industrial Processes (3 Hours)
- ❑ MEET 3990, Applied Thermodynamics (3 Hours)
- ❑ MEET 4050, Mechanical Design (3 Hours)
- ❑ MEET 4350, Heat Transfer Applications (3 Hours)
- ❑ MEET 4360, Experimental Thermal Sciences (3 Hours)
- ❑ MEET 4780, Senior Design I (1 Hour)
- ❑ MEET 4790, Senior Design II (3 Hours)
  
- ❑ MFET 3110, Machining Principles and Processes (3 Hours)
- ❑ MFET 4190, Quality Assurance (3 Hours)
- ❑ MFET 4200, Engineering Cost Analysis (3 Hours)
- ❑ MFET 4210, CAD/CAM System Operations (3 Hours)

### TECHNICAL ELECTIVES

- ❑ Advanced level (3\*\*\* or 4\*\*\* level) course chose from appropriate elective options (3 Hours)
- ❑ Advanced level (3\*\*\* or 4\*\*\* level) course chose from appropriate elective options (3 Hours)
- ❑ Any level course chosen from appropriate elective options (3 Hours)

*Recommended elective options are below:*

MFET 4220	LGAV 3100	CNET 3410
MEET 3750	LGAV 3110	MKTG 3651
MEET 4100	LGAV 3120	MGMT 3820
	LGAV 3130	MGMT 3850

*Completion of MEET 3550, MFET 3110, MFET 4190, MFET 4200, and MFET 4210 at UNT also earns a Certificate in Manufacturing Engineering Technology upon graduation.*

# 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.
	Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp.	ENGR 1304	Engineering Graphics	3	F., Sp., Su.
	Total Hours		14		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
				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	Options at mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		14		University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
					Total Hours		16	

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	Options on mydegreeaudit.unt.edu	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	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		15	
	Total Hours		16					

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CSCE, MEET, and MFET 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. You should check your degree audit at mydegreeaudit.unt.edu each term.

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# Mechanical Engineering Technology – Pre-Calculus

2023-2024 Catalog: Sample Five-Year Schedule

Year One	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100, 1600 or Test Placement</i>	5	F., Sp., Su.	MATH 1710	Calculus I <i>Pre-req: MATH 1650 or Test Placement</i>	4	F., Sp., Su.
CHEM 1410	General Chemistry I <i>Pre-req: MATH 1100 or higher</i>	3	F., Sp., Su.	ENGR 1030	Technological Systems	3	F., Sp.	
CHEM 1430	General Chemistry I Lab <i>Co/Pre-req: CHEM 1410</i>	1	F., Sp., Su.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.	
Comm. Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	
Total Hours		12		Total Hours		13		

Year Two	MATH 1720	Calculus II <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2220	Electricity and Magnetism <i>Pre-reqs: MATH 1720, PHYS 1710, 1730</i>	3	F., Sp., Su.
	PHYS 1710	Mechanics <i>Pre-req: MATH 1710</i>	3	F., Sp., Su.	PHYS 2240	Electricity and Magnetism Lab <i>Co-req/pre-req: PHYS 2220</i>	1	F., Sp., Su.
	PHYS 1730	Mechanics Lab <i>Co/Pre-req: PHYS 1710</i>	1	F., Sp., Su.	ENGR 2301	Statics <i>Pre-reqs: PHYS 1710, 1730</i>	3	F., Sp., Su.
	ENGR 1304	Engineering Graphics	3	F., Sp.	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		13		Total Hours		14	

Year Three	ENGR 2302	Dynamics <i>Pre-reqs: ENGR 2301, MATH 1720</i>	3	F., Sp., Su.	ENGR 3450	Engineering Materials <i>Pre-reqs: ENGR 2332, CHEM 1410/1430, PHYS 1710/1730</i>	4	F., Sp.
	ENGR 2332	Mechanics of Materials <i>Pre-reqs: ENGR 2301</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	EENG 2610	Circuit Analysis <i>Pre-req: MATH 1720 Co/Pre-req: PHYS 2220/2240</i>	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	EENG 2611	Circuit Analysis Lab <i>Co/Pre-req: EENG 2610</i>	1	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	Total Hours		13	
	Total Hours		13					

Year Four	MEET 3940	Fluid Mechanics <i>Pre-req: ENGR 2302, MATH 1720</i>	3	F., Sp., Su.	MEET 3980	Digital Controls of Industrial Processes <i>Pre-reqs: EENG 2610/2611, CSCE 1030</i>	3	Sp.
	MEET 3990	Applied Thermodynamics <i>Pre-req: ENGR 2332, CHEM 1410/1430</i>	3	F., Sp., Su.	MEET 3650	Design of Mechanical Components <i>Pre-req: ENGR 2332</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.
	Advanced Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies	MEET 3550	Geometric Dimens. and Tolerancing <i>Pre-reqs: MFET 3110, ENGR 1304</i>	3	Sp.
	Total Hours		12		Total Hours		12	

Year Five	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 Co/Pre-req: MFET 4210, MEET 4050, 4350</i>	1	F.	MFET 4190	Quality Assurance <i>Pre-req: MATH 1720</i>	3	Sp.
	MFET 4200	Engineering Cost Analysis <i>Pre-req: MATH 1720</i>	3	F.	Total Hours		9	
	Advanced Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies				
	Total Hours		13					

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CSCE, MEET, and MFET 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. You should check your degree audit at mydegreeaudit.unt.edu each term. You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Mechanical Engineering Technology – College Algebra

2023-2024 Catalog: Sample Five-Year Schedule

	Fall Semester	Course Title	Credit Hours	Term(s) Offered	Spring Semester	Course Title	Credit Hours	Term(s) Offered
	Year One	MATH 1100	College Algebra <i>Pre-req: TSI Completion</i>	3	F., Sp., Su.	MATH 1650	Pre-Calculus <i>Pre-req: MATH 1100, 1600 or Test Placement</i>	5
ENGR 1030		Technological Systems	3	F., Sp.	TECM 2700	Technical Writing <i>Pre-req: Communication Core</i>	3	F., Sp., Su.
Comm. Core		Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
University Core		Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
Total Hours			12		Total Hours		14	

Year Two	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.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	ENGR 1304	Engineering Graphics	3	F., Sp.
	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	Total Hours		14		Total Hours		13	

Year Three	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.
	EENG 2610 & 2611	Circuit Analysis & Lab <i>Pre-req: MATH 1720</i> <i>Co/Pre-req: PHYS 2220/2240</i>	4	F., Sp., Su.	MEET 3980	Digital Controls of Industrial Processes <i>Pre-reqs: EENG 2610/2611 and CSCE 1030</i>	3	Sp.
	ENGR 2301	Statics <i>Pre-reqs: PHYS 1710, 1730</i>	1	F., Sp.	University Core	Options on mydegreeaudit.unt.edu	3	F., Sp., Su.
	CSCE 1030	Computer Science I <i>Pre-req: MATH 1650 or Co-req: MATH 1710</i>	4	F., Sp., Su.	Total Hours		12	
	Total Hours		15					

Year Four	ENGR 3450	Engineering Materials <i>Pre-reqs: ENGR 2332, CHEM 1410/1430 and PHYS 1710/1730</i>	4	F., Sp.	MEET 3650	Design of Mechanical Components <i>Pre-req: ENGR 2332</i>	3	Sp.
	MEET 3940	Fluid Mechanics <i>Pre-req: ENGR 2302, MATH 1720</i>	3	F., Sp., Su.	MFET 4190	Quality Assurance <i>Pre-req: MATH 1720</i>	3	Sp.
	MEET 3990	Applied Thermodynamics <i>Pre-req: ENGR 2332, CHEM 1410/1430</i>	3	F., Sp., Su.	MFET 4210	CAD/CAM System Operation <i>Pre-req: MFET 3110, ENGR 1304, and MATH/PHYS/CHEM requirements</i>	3	F., Sp.
	MFET 3110	Machining Principles and Processes <i>Pre-req: MATH 1650</i>	3	F., Sp.	MEET 3550	Geometric Dimens. and Tolerancing <i>Pre-reqs: MFET 3110, ENGR 1304</i>	3	Sp.
	Total Hours		13		Total Hours		12	

Year Five	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.	Total Hours		9	
	Advanced Elective	Options at mydegreeaudit.unt.edu Must complete pre-reqs	3	Varies				
	Total Hours		13					

ENGL, TECM, MATH, CHEM, PHYS, ENGR, CSCE, MEET, and MFET 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. You should check your degree audit at mydegreeaudit.unt.edu each term.

You should meet with your advisor each term to discuss individual scheduling, program decisions, etc.

# Minor/Certificate Information

## ADDITIVE AND DIGITAL MANUFACTURING CERTIFICATE (12 Hours)

- ❑ TECM 2700, Technical Writing (3 Hours)
- ❑ ENGR 299Z or MTSE 299Z or MEEN 299Z (0 Hours)
- ❑ 9 hours (3 courses) chosen from BMEN 3312, BMEN, 4100, BMEN 4312, ENGR 1304, ENGR 3450, MTSE 3000, MTSE 4040, MTSE 4060, MTSE 4900 (Additive Manufacturing), MEEN 3100, MEEN 4800 (CAD/CAE), MEET 3550, MEET 3750, MEET 4100, MGMT 4850, DSCI 2710, OPSM 3830

## BIOMEDICAL ENGINEERING MINOR (19 Hours)

- ❑ BMEN 2210, DAQ Practices (3 Hours)
- ❑ BMEN 2320, Biomedical Instrumentation I (4 Hours)
- ❑ BMEN 3350, Biomedical Transport Phenomena (3 Hours)
- ❑ 6 advanced hours (2 courses) chosen from BMEN 3311, BMEN 3312, BMEN 3321
- ❑ 3 advanced hours (1 course) chosen from BMEN 4\*\*\*

## COMMUNICATIONS SYSTEMS CERTIFICATE (12 Hours)

- ❑ EENG 3920, Modern Comm. System Design (3 hours)
- ❑ 9 hours (3 courses) chosen from EENG 4610, EENG 4810, EENG 4820, EENG 4850, EENG 4680, EENG 4\*\*\* elective approved by Department

## COMPUTER SCIENCE AND ENGINEERING MINOR (19 Hours)

- ❑ CSCE 1030, Computer Science I (4 Hours), or CSCE 1035, Computer Programming I (4 Hours)
- ❑ CSCE 1040, Computer Science II (3 Hours), or CSCE 1045, Computer Programming II (3 Hours)
- ❑ CSCE 2100, Foundations of Computing (3 Hours)
- ❑ CSCE 2110, Foundations of Data Structures (3 Hours)
- ❑ 6 advanced hours (2 courses) chosen from CSCE 3\*\*\*, 4\*\*\*

## CYBERSECURITY MINOR (19 Hours)

- ❑ CSCE 1035, Computer Programming I (4 Hours)
- ❑ CSCE 1045, Computer Programming II (3 Hours)
- ❑ CSCE 2110, Foundations of Data Structures (3 Hours)
- ❑ CSCE 3550, Foundations of Security (3 Hours)
- ❑ CSCE 3560, Computer Systems Security (3 Hours)
- ❑ CSCE 3600, Systems Programming (3 Hours)

## DIGITAL SYSTEMS CERTIFICATE (12 Hours)

- ❑ EENG 3910, DSP System Design (3 hours)
- ❑ 9 hours (3 courses) chosen from EENG 4710, EENG 4720, EENG 4740, EENG 4760, EENG 4\*\*\* elective approved by Department

## ELECTRICAL ENGINEERING MINOR (18 Hours)

- ❑ EENG 2610, Circuit Analysis, (3 Hours) & EENG 2611, Circuit Analysis Lab (1 Hour)
- ❑ EENG 2620, Signals and Systems (3 Hours) & EENG 2621, Signals and Systems Lab (1 Hour)
- ❑ EENG 2710, Digital Logic Design (3 Hours) & EENG 2711, Digital Logic Design Lab (1 Hour)
- ❑ EENG 3510, Electronics I (3 Hours)
- ❑ EENG 4\*\*\*, EENG advanced level course (3 Hours)

## ELECTROMECHANICAL SYSTEMS AND MECHATRONICS CERTIFICATE (12 Hours)

- ❑ 12 hours (4 courses) chosen from EENG 2620, EENG 3510, EENG 3520, EENG 4310, ENGR 2302, MEEN 3130, MEEN 3230, MEEN 4760

## ENERGY ASSESSMENT OF BUILDINGS CERTIFICATE (18 Hours)

- ❑ MEEN 3220, Thermal Fluid Science for Buildings (3 Hours)
- ❑ MEEN 4320, Building Energy Systems (3 Hours)
- ❑ MEEN 4335, Comp. Sim. Of Building Energy Systems (3 Hours)
- ❑ MEEN 4340, Energy Efficiencies & Green Building Design for Commercial Buildings (3 Hours)
- ❑ MEEN 4350, Energy Efficiencies and Green Building Design for Residential Buildings (3 Hours)

## GAME PROGRAMMING CERTIFICATE (12 Hours)

- ❑ CSCE 4210, Game Programming I (3 Hours)
- ❑ CSCE 4220, Game Programming II (3 Hours)
- ❑ CSCE 4250, Topics in Game Development (3 Hours)
- ❑ CSCE 4255, Programming Math & Physics for Games (3 Hours)

## GENERAL ENGINEERING TECHNOLOGY MINOR (18 Hours)

- ❑ 12 hours (4 courses) chosen from CNET, ENGR, MEET, and/or MFET 1\*\*\*, 2\*\*\*, 3\*\*\*, 4\*\*\* level
- ❑ 6 advanced hours (2 courses) chosen from CNET, ENGR, MEET, MFET 3\*\*\* or 4\*\*\* level

## MANUFACTURING ENGINEERING TECHNOLOGY CERTIFICATE (15 Hours)

- ❑ MFET 3110, Machining Principles and Processes (4 Hours)
- ❑ MFET 4190, Quality Assurance (3 Hours)
- ❑ MFET 4200, Engineering Cost Analysis (2 Hours)
- ❑ MFET 4210, CAD/CAM System Operations (3 Hours)
- ❑ 3 advanced hours (1 course) chosen from MEET 3550, MEET 3750, MEET 4100, MFET 4220

## MATERIALS SCIENCE AND ENGINEERING MINOR (18 Hours)

- ❑ MTSE 3000, Fundamentals of Materials Sci. & Engr. I (3 Hours)
- ❑ 6 advanced hours (2 courses) chosen from MTSE 3010, MTSE 3030, MTSE 3050, MTSE 3070
- ❑ 9 advanced hours (3 courses) chosen from MTSE 3\*\*\*, 4\*\*\*

## MECHANICAL AND ENERGY ENGINEERING MINOR (18 Hours)

- ❑ MEEN 2210, Thermodynamics I (3 Hours)
- ❑ ENGR 2302, Mechanics II (3 Hours)
- ❑ ENGR 2332, Mechanics III (3 Hours)
- ❑ 9 advanced hours chosen from MEEN 3100, MEEN 3110, MEEN 3120, MEEN 3130, MEEN 3210, MEEN 3230, MEEN 3240/3242, MEEN 4110, MEEN 4140, MEEN 4160

## RF AND CIRCUIT DESIGN CERTIFICATE (12 Hours)

- ❑ EENG 3520, Electronics II (3 hours)
- ❑ 9 hours (3 courses) chosen from EENG 4210, EENG 4310, EENG 4320, EENG 4610, EENG 4640, EENG 4\*\*\* elective approved by Department

## SECURITY CERTIFICATE (18 Hours)

- ❑ CSCE 2610, Assembly Lang. and Comp. Organization (3 Hours)
- ❑ CSCE 3530, Intro. To Computer Networks (3 Hours)
- ❑ CSCE 3550, Foundations of Computer Security (3 Hours)
- ❑ CSCE 4350, Intro. To Database Systems Design (3 Hours)
- ❑ CSCE 4560, Secure Electronic Commerce (3 Hours)
- ❑ CSCE 4600, Operating Systems (3 Hours)

## SIGNAL PROCESSING AND CONTROL CERTIFICATE (12 Hours)

- ❑ EENG 3910, DSP System Design (3 hours)
- ❑ 9 hours (3 courses) chosen from EENG 4710, EENG 4720, EENG 4740, EENG 4760, EENG 4\*\*\* elective approved by Department

Completion of a minor and/or a certificate is not required in order to graduate. Must complete appropriate prerequisites for minor or certificate courses. Must complete certificate courses at UNT. Grades of "C" required for most minor or certificate courses.



## University Core Options

### COMMUNICATION (1 Course)

ENGL 1310, First-Year Writing I  
 ENGL 1311, Honors First-Year Writing I  
 ENGL 1315, Writing about Literature I  
 LING 1312, Writing for International Students  
 TECM 1700, Intro. To Technical Writing

### AMERICAN HISTORY I (1 Course)

HIST 2610, U.S. History to 1865  
 HIST 2675, Honors U.S. History to 1865

### AMERICAN HISTORY II (1 Course)

HIST 2620, U.S. History from 1865  
 HIST 2685, Honors U.S. History from 1865

### FEDERAL GOVT/POLI. SCIENCE (1 Course)

PSCI 2305, U.S. Political Behavior & Policy  
 PSCI 2315, Honors U.S. Political Behav. & Policy

### STATE GOVT/POLI. SCIENCE (1 Course)

PSCI 2306, U.S. and Texas  
 PSCI 2316, Honors U.S. and Texas

### CREATIVE ARTS (1 Course)

ART 1300, Art Appreciation  
 ART 1301, Honors Art Appreciation  
 ART 2360, Art History Survey II  
 ART 2370, Art History Survey III  
 COMM 2060, Performance of Literature  
 DANC 1200, Appreciation of Dance  
 DANC 2800, Survey of Dance  
 MUET 3060, African American Music  
 MUJS 3400, Understanding Jazz  
 MUMH 1610, Music as Communication  
 MUMH 2040, Music Appreciation  
 MUMH 2050, Sounds and Cinema  
 MUMH 2060, History of Rock  
 MUMH 3000, Nineteenth-Century Music  
 MUMH 3010, Twentieth-Century Music  
 MUMH 3100, Music, Gender, Sexuality  
 MUMH 3200, Music as Politics  
 PHIL 1900, Philosophy of Art

### CREATIVE ARTS Cont'd (1 Course)

THEA 1340, Aesthetics of the Theatre  
 THEA 2340, Theater Appreciation  
 THEA 3030, World Theatre to 1700  
 THEA 3040, World Theatre from 1700

### LANGUAGE, PHILOSOPHY, & CULTURE

(1 Course)  
 AGER 2250, Aging in Film and Lit  
 ANTH 3101, American Culture and Society  
 ANTH 3110, Indigenous People of N. Am.  
 ANTH 3120, Indigenous Cultures of S.W.  
 ANTH 3130, African American Anthropology  
 ANTH 3140, Latinos in the U.S.  
 ANTH 3200, Latin American Cultures  
 ANTH 3210, Mesoamerica  
 ANTH 3220, Mayan Culture  
 ANTH 3300, Peoples of the Pacific  
 ANTH 3400, Peoples of Africa  
 ANTH 3500, Peoples of the Middle East  
 ANTH 3700, Peoples of South Asia  
 ART 2350, Art History Survey I  
 ENGL 2210, World Literature to 1700  
 ENGL 2220, World Literature from 1700  
 ENGL 2321, British Literature  
 ENGL 2326, American Literature  
 ENGL 2331, World Literature  
 ENGL 2341, Forms of Literature  
 ENGL 2351, Mexican American Literature  
 ENGL 3450, Short Story  
 FREN 3040, France Today  
 FREN 4060, Studies in French Literature  
 FREN 4310, Contemp. French Civilization  
 GEOG 1000, National Parks  
 GERM 3040, Topics in German Culture  
 GERM 3050, Topics in German Culture  
 HDFS 2313, Courtship and Marriage  
 HIST 1050, World History to 16<sup>th</sup> Century  
 HIST 1060, World History from 16<sup>th</sup> Century

### LANGUAGE, PHILOSOPHY, & CULTURE Cont'd

(1 Course)  
 ITAL 3040, Topics in Italian Culture  
 ITAL 3050, Comp. Italian Culture Through Film  
 JAPN 3020, Advanced Japanese I  
 LING 2050, Language of Now  
 MUET 2000, Global Perspectives  
 MUET 3030, Music Cultures of the World  
 PHIL 1050, Introduction to Philosophy  
 PHIL 1400, Contemporary Moral Issues  
 PHIL 2050, Introduction to Logic  
 PHIL 2070, World Religions  
 PHIL 2600, Ethics in Science

### SOCIAL AND BEHAVIORAL SCIENCES (1 Course)

AGER 4560, Minority Aging  
 AGER 4800, Social Context of Aging  
 ANTH 1010, Intro. To Anthropology  
 ANTH 2300, Culture and Society  
 BEHV 2300, Behavior Principles I  
 CJUS 2100, Crime and Justice in the U.S.  
 COMM 2020, Interpersonal Comm.  
 EADP 1010, Exploring Disasters  
 EADP 4050, Special Pop. In Disasters  
 ECON 1100, Microeconomics  
 ECON 1110, Macroeconomics  
 GEOG 1200, Global Societies  
 HDFS 1013, Human Development  
 HLTH 2200, Family Life and Human Sexuality  
 JOUR 1210, Mass Comm. And Society  
 MDSE 2750, Consumers in Global Market  
 PADM 2100, Cultural Competency  
 PSYC 1630, General Psychology I  
 PSYC 1650, Biological Psychology  
 PSYC 3620, Developmental Psychology  
 RESM 3450, Diversity and Inclusion in RESM  
 RHAB 3100, Disability and Society  
 SOCI 1510, Intro to Sociology  
 SOWK 1450, Intro to Social Work

## AP, IB, CLEP, DC, Transfer – University Core Credits

### COMMUNICATION

AP English Lang. And Comp. Score of 3  
 IB English A: Lang. and Lit. Score of 5  
 Community College: ENGL 1301  
 Community College: ENGL 1302

### 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 Theater Arts  
 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  
 IB Philosophy score  
 IB English Language A: Lit.  
 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 Anthropology score  
 IB Economics score  
 IB Geography score  
 IB Psychology score  
 CLEP Macroeconomics  
 CLEP Microeconomics  
 CLEP Human Growth and Development  
 CLEP Introductory Psychology  
 CLEP Introductory Sociology  
 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

## AP, IB, CLEP, DC, Transfer – Major Credits

### TECHNICAL COMMUNICATIONS

Community College ENGL 2311: TECM 2700

### WRITING COMMUNICATIONS

AP English Lang. And Comp. Score of 3: ENGL 1320

IB English A: Lang. and Lit. Score of 5: ENGL 1320

Community College ENGL 1302: ENGL 1320

### COMPUTING/PROGRAMMING

AP Computer Science A score of 3: CSCE 1010

AP Computer Science A score of 4: CSCE 1030

AP Computer Science Principles score of 3: CSCE 1010

IB Computer Science Computing Studies: CSCE 1030, 1040

CLEP Info Systems & Computer Applications: CSCE 1\*\*\*

Community College COSC 1336 or 1436: CSCE 1030

Community College COSC 1337 or 1437: CSCE 1040

Community College COSC 2325 or 2425: CSCE 2610

Community College COSC 2326 or 2426: CSCE 2110

Community College MATH 2305: Substitutes for CSCE 2100

### ENGINEERING

Community College ENGR 1201: May substitute for  
EENG 1910, ENGR 1030, MEEN 1000, or MTSE 1100

Community College ENGR 1204 or 1304: ENGR 1304

Community College ENGR 2105: EENG 2611

Community College ENGR 2106: EENG 2711

Community College ENGR 2107: ENGR 2415

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 2306: EENG 2710

Community College ENGR 2307: ENGR 2405

Community College ENGR 2405: EENG 2610, 2611

Community College ENGR 2406: EENG 2710, 2711

### BIOLOGY

AP Biology score of 3: BIOL 1112, 1122

AP Biology score of 4, 5: BIOL 1710, 1720, 1760

AP Environmental Science score of 3: BIOL 1132

IB Biology: BIOL 1710, 1720, 1760

CLEP Biology: BIOL 1710, 1720

Community College BIOL 1108: BIOL 1\*\*\*

Community College BIOL 1109: BIOL 1\*\*\*

Community College BIOL 1306: BIOL 1710

Community College BIOL 1307: BIOL 1720

Community College BIOL 1308: BIOL 1\*\*\*

Community College BIOL 1309: BIOL 1\*\*\*

Community College BIOL 1406: BIOL 1710, 1760

Community College BIOL 1407: BIOL 1720, 1760

Community College BIOL 1408: BIOL 1\*\*\*

Community College BIOL 1409: BIOL 1\*\*\*

Community College BIOL 2101: BIOL 2311

Community College BIOL 2301: BIOL 2301

Community College BIOL 2401: BIOL 2301, 2311

### CHEMISTRY

AP Chemistry score of 3: CHEM 1360

AP Chemistry score of 4: CHEM 1410, 1430

AP Chemistry score of 5: CHEM 1410, 1430, and 1420, 1440

CLEP General Chemistry: CHEM 1410, 1420

IB Chemistry: CHEM 1410, 1430, and 1420, 1440

Community College CHEM 1305: CHEM 1\*\*\*

### CHEMISTRY (Continued)

Community College CHEM 1307: CHEM 1\*\*\*

Community College CHEM 1311 & 1111: CHEM 1410, 1430

Community College CHEM 1312 & 1112: CHEM 1420, 1440

Community College CHEM 1405: CHEM 1\*\*\*

Community College CHEM 1407: CHEM 1\*\*\*

Community College CHEM 1411: CHEM 1410, 1430

Community College CHEM 1412: CHEM 1420, 1440

### PHYSICS

AP Physics 1 score of 3: PHYS 1210

AP Physics 1 score of 4: PHYS 1410, 1430

AP Physics 2 score of 3: PHYS 1315

AP Physics 2 score of 4: PHYS 1420, 1440

AP Physics C (Mechanics) score of 3: PHYS 1410, 1430

AP Physics C (Mechanics) score of 4: PHYS 1710, 1730

AP PHYS Physics C (Electricity and Magnetism) score of 3: PHYS 1420, 1440

AP PHYS Physics C (Electricity and Magnetism) score of 4: PHYS 2220, 2240

IB Physics: PHYS 1410, 1430 and 1420, 1440

Community College PHYS 1301 & 1101: PHYS 1410, 1430

Community College PHYS 1302 & 1102: PHYS 1440

Community College PHYS 1401: PHYS 1410, 1430

Community College PHYS 1402: PHYS 1420, 1440

Community College PHYS 2325 & 2125: PHYS 1710, 1730

Community College PHYS 2326 & 2126: PHYS 2220, 2240

Community College PHYS 2425: PHYS 1710, 1730

Community College PHYS 2426: PHYS 2220, 2240

### MATHEMATICS

AP Statistics score of 3: MATH 1680

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 Math Analysis: MATH 1580

IB Math Analysis and Approaches: MATH 1580

IB Mathematic Studies: MATH 1580

IB Mathematics – Calculus: MATH 1710

IB Mathematics Unspecified: MATH 1\*\*\*

CLEP College Mathematics: Elective

CLEP College Algebra: MATH 1100

CLEP Trigonometry: MATH 1600

CLEP Pre-calculus: MATH 1650

CLEP Calculus: MATH 1710

Community College MATH 1314 or 1414: MATH 1100

Community College MATH 1316: MATH 1600

Community College MATH 1325 or 1425: MATH 1190

Community College MATH 1342 or 1442 or 2342 or 2442: MATH 1680

Community College MATH 2312 or 2412: MATH 1650

Community College MATH 2313 or 2413: MATH 1710

Community College MATH 2314 or 2414: MATH 1720

Community College MATH 2315 or 2415: MATH 2730

Community College MATH 2318 or 2418: MATH 2700

Community College MATH 2320 or 2420: Substitutes for MATH 3410

Community College ENGR 2300: Substitutes for MATH 2700

## Preparation You Need to Secure a Full-Time Job

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### Get an Internship

Your Career Center advisor can assist you with applying for paid internships which provide you with the hands-on experience that all employers want when considering you for a full-time position after you have graduated. The Career Center also hosts 2 engineering/STEM career fairs each year and offers services in resume writing, cover letter writing, interviewing skills, and printing free business cards.

### Assist with Research

Research opportunities exist within engineering departments as well as national and international team competitions mentored by organizations or industry. Enrollment in zero credit research course(s) reflect your research experience but require no cost or grade documentation.

### Earn a Graduate Degree

You can pursue the Grad Track program **while completing your bachelor's degree** to accelerate the time required to earn a Master of Science (MS) or a Doctor of Philosophy (PhD) degree. Students are allowed to count courses toward **both their bachelor's and graduate degree**, saving both time and money.

Eligibility: Students should apply for the Grad Track Program the semester before their Senior Design or Capstone rotation begins. Successful applications typically have a GPA of 3.5 or better. Students typically earn a MS or PhD in the same or a similar program as their **bachelor's** program. Students have to enroll full-time in the MS or PhD program in the first long semester after completing their **bachelor's** degree in order for the completed graduate-level courses/hours to count toward the graduate degree.

To Apply: Each department has its own application for Grad Track. You may also have to submit transcripts and letters of recommendation. Please visit your department's website and/or contact your department for more information.

Masters of Science (MS) Programs	Hours Earned During <b>Bachelor's</b>	Doctor of Philosophy (PhD) Programs	Hours Earned During <b>Bachelor's</b>
Artificial Intelligence	9	Computer Science and Engineering	12
Biomedical Engineering	9	Electrical Engineering	12
Computer Engineering	9	Materials Science and Engineering	12
Computer Science	9	Mechanical and Energy Engineering	12
Cybersecurity	9		
Data Engineering	9		
Electrical Engineering	9		
Engineering Technology	9		
Materials Science and Engineering	9		
Mechanical and Energy Engineering	9		

### Get Licensed:

Fundamentals of Engineering (FE) Exam: is not required in order to earn your degree but it is generally your first step in the process to becoming a professionally licensed engineer. It is designed for recent graduates and students who are close to finishing an undergraduate degree. Passing this exam legally certifies the candidate as an "engineer in training" (EIT) or an "engineer intern" (EI). UNT tutoring options for the exam can be found at [engineering.unt.edu/engineering-exam](http://engineering.unt.edu/engineering-exam).

Principles and Practices of Engineering (PE) exam: PE licensure is the engineering profession's highest standard of competence. EITs and EIs are permitted to attempt the exam after completing a minimum of 4 years of professional work experience under the supervisor of a PE. Passing the PE exam qualifies the candidate as a licensed professional engineer.

## Resource Information

Catalog (Bulletin)	Catalog.unt.edu
Computer Access Labs	Computerlabs.unt.edu
Counseling, Health, Testing Services:	
Child and Family Resource Clinic	Coe.unt.edu/child-and-family-resource-clinic
Counseling and Human Development Center	Coe.unt.edu/counseling-and-human-development
Counseling and Testing Service	Unt.edu/cat
Health and Wellness Center	Healthcenter.unt.edu
Psychology Clinic	Psychology.unt.edu/clinic
Togetherall (online mental health support)	Account.v2.togetherall.com/register/student
WELL Clinic (personal and career counseling)	Untwell.unt.edu
Deadlines (Registration, Drop, Withdrawal, Payment, etc.)	Registrar.unt.edu/registration-guides-by-semester
Dean of Students (Withdrawal Process, Complaints, etc.)	Deanofstudents.unt.edu
Email Account (EagleConnect)	It.unt.edu/eagleconnect
Engineering Student Organizations and Honor Societies	Engineering.unt.edu/students/organizations
Employment, Internships, and Job Skills:	
Career Center	Careercenter.unt.edu
InRoads Internships	Inroads.org
InternMatch	Intermatch.com
Texas Internships	Texasinternships.jobs
Financial Assistance:	
Financial Aid and Scholarships Office	Financialaid.unt.edu
Financial Services (Student Accounting)	Sfs.unt.edu
Money Management Center	Moneymanagement.unt.edu
Housing	Housing.unt.edu
Libraries	Library.unt.edu
Office of Disability Access	Disability.unt.edu
Registrar (Drops, Excessive Hours, Registration, Transcripts Verification of Enrollment)	Registrar.unt.edu
Registration Information	Registration.unt.edu
Scholarships	Engineering.unt.edu/students/scholarships Financialaid.unt.edu
Student Activities and Organizations	Studentactivities.unt.edu
Student Government Association	Sga.unt.edu
Student Legal Services	Studentlegal.unt.edu
Texas Success Initiative (TSI): Learning Center	Learningcenter.unt.edu
Tutoring and Academic Improvement Services:	
Business Labs (ACCT, BCIS, etc.)	Cob.unt.edu/lab
Chemistry Resource Center	Chemistry.unt.edu
Chegg (online)	Chegg.com
Code Academy	Codeacademy.com
Coursera (online)	Coursera.org
Economics Help Center	Economics.unt.edu/undergraduate/help-center
Educator (online)	Educator.com
Edx (online)	Edx.org
Khan Academy (online)	Khanacademy.org
Learning Center (numerous courses)	Learningcenter.unt.edu
LinkedIn Learning (online)	Linkedin.com/learning
Math Lab	Math.unt.edu/mathlab
Mathway (online)	Mathway.com
Physics Instructional Center	Phys.unt.edu/PIC
Quizlet (online)	Quizlet.com
Thinkwell (online)	Thinkwell.com
Wolf Ram Alpha (online)	Wolframalpha.com
Writing Lab	Writingcenter.unt.edu/
Veteran Center and Services	Veteranscenter.unt.edu or unt.edu/veterans and registrar.unt.edu