

BS IN ELECTRICAL ENGINEERING DEGREE IN THREE ACADEMIC MAP

2022-2023 CATALOG YEAR

This is an unofficial simplified checklist effective fall 2018. Degree requirements may change. You may need elective courses to help reach a minimum of 128 Total Hours & 42 Advanced Hours. Check with an advisor.

Must earn at least a grade of “C” in each course above except for most University Core courses.

ELECTRICAL ENGINEERING

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

<p>Department of Electrical Engineering Discovery Park B-270; (940) 891-6872 Faculty Advisors: Jason Mieritz Jason.Mieritz@unt.edu</p>	<p>Engineering Advising Office Discovery Park A-101; (940) 565-4201 Academic Advisors: Errica Smith, Abdal Elkharoubi Errica.Smith@unt.edu, Abdal@unt.edu</p>
<p>University Core</p>	<p>Major Requirements (Grades with a C or better)</p>
<p><u>COMMUNICATION</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) ▪ Grade of “C” or better is required <p><u>AMERICAN HISTORY I</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) <p><u>AMERICAN HISTORY II</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) <p><u>FEDERAL GOVERNMENT/POLITICAL SCIENCE</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) <p><u>STATE GOVERNMENT/POLITICAL SCIENCE</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) 	<p><u>ELECTRICAL ENGINEERING</u></p> <ul style="list-style-type: none"> ▪ EENG 1910, Learning to Learn (3 Hours) ▪ EENG 2610, Circuit Analysis (3 Hours) & EENG 2611, Circuit Analysis Lab (1 Hour) ▪ EENG 2620, Signals & Systems (3 Hours) & EENG 2621, Signals & Systems Lab (1 Hour) ▪ EENG 2710, Digital Logic Design (3 Hours) & EENG 2711, Digital Logic Design Lab (1 Hour) ▪ EENG 2920, Analog Circuit Design (3 Hours) ▪ EENG 3410, Engineering Electromagnetics (3 Hours) & EENG 3411, Engineering Electromagnetics Lab (1 Hour) ▪ EENG 3510, Electronics 1 (3 Hours) & EENG 3511, Electronics Lab (1 Hour) ▪ EENG 3520, Electronics II (3 Hours)

<p><u>CREATIVE ARTS</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) <p><u>LANGUAGE, PHILOSOPHY, & CULTURE</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) <p><u>SOCIAL & BEHAVIORAL SCIENCES</u></p> <ul style="list-style-type: none"> ▪ 1 Course (3 Hours) 	<ul style="list-style-type: none"> ▪ EENG 3710 Computer Organization (3 Hours) ▪ EENG 3810, Communications System (3 Hours) & EENG 3811, Communications Systems Lab (1 Hour) ▪ EENG 3910, DSP System Design (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),
<p>Major Requirements (Grades of C or better)</p>	
<p><u>TECHNICAL COMMUNIICATIONS</u></p> <ul style="list-style-type: none"> ▪ TECM 2700, Technical Writing (3 Hours) <p><u>MATHEMATICS</u></p> <ul style="list-style-type: none"> ▪ MATH 1710, Calculus I (4 Hours) ▪ MATH 1720, Calculus II (3 Hours) ▪ MATH 2730, Multivariable Calculus (3 Hours) ▪ MATH 2700, Linear Algebra & Vector Geometry (3 Hours) ▪ MATH 3410, Differential Equations (3 Hours) ▪ MATH 3680, Applied Statistics (3 Hours) <p><i>Please note that completion of the above UNT Math courses will earn a minor in Mathematics.</i></p>	<p>EENG 4*** level elective can be chosen from: EENG 4010, 4310, 4330, 4340, 4350, 4410, 4710, 4760, 4810, 4850, & 4900</p> <p>EENG 4010 is a topics course & the content of 4010 varies for each semester. EENG 4010 may be repeated for credit if you do not retake the exact same topic the 2nd time.</p> <p>EENG 4920 & 4951 cannot be taken as electives.</p>
<p><u>SCIENCES</u></p> <ul style="list-style-type: none"> ▪ 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) <p>OR</p> <ul style="list-style-type: none"> ▪ CHEM 1415, Chemistry for Engineers (3 Hours) & CHEM 1435, Chemistry for Engineers Lab (1 Hour) 	<p><u>COMPUTER PROGRAMING</u></p> <ul style="list-style-type: none"> ▪ CSCE 1030, Computer Science I (4 Hours) <p><u>MANAGEMENT</u></p> <ul style="list-style-type: none"> ▪ OPSM 3830, Operations Management (3 Hours) ▪ MGMT 3850, Entrepreneurship (3 Hours) <p><i>A minor in Business Foundations will fulfill the management requirement.</i></p>

Year 1 at UNT

FALL	Hrs.
CSCE 1030 (MATH 1650)	4
PHYS 2220 (MATH 1720, PHYS 1710, 1730)	3
PHYS 2240 (MATH 1720, PHYS 1710, 1730)	1
MATH 2730 (MATH 1720)	3
EENG 2610 (MATH 1720, coreq PHYS 2220, 2240)	3
EENG 2611 (coreq EENG 2610)	1
<i>Total Hours</i>	<i>15</i>

SPRING	Hrs.
TECM 2700	3
EENG 2920 (EENG 2610, 2611)	3
EENG 2620 (EENG 2610, 2611, MATH 2730)	3
EENG 2621 (coreq EENG 2620)	1
EENG 2710	3
EENG 2711 (EENG 2710)	1
<i>Total Hours</i>	<i>14</i>

Year 2 at UNT

FALL	Hrs.
MATH 2700 (MATH 1720)	3
MATH 3410 (MATH 1720 coreq MATH 2700)	3
EENG 3510 (EENG 2610, 2611)	3
EENG 3511 (coreq EENG 3510)	1
EENG 3910 (EENG 2620, 2621)	3
<i>Total Hours</i>	<i>13</i>

SPRING	Hrs.
EENG 3520 (EENG 3510, 3511)	3
EENG 3710 (EENG 2710, 2711, CSCE 1030)	3
EENG 3810 (EENG 2620, 3510, MATH 3680)	3
EENG 3811 (coreq EENG 3810)	1
EENG 3920 (coreq EENG 3520)	3
MATH 3680 (MATH 1710, coreq MATH 1720)	3
<i>Total Hours</i>	<i>16</i>

Year 3 at UNT

FALL	Hrs.
EENG 3410 (EENG 2610, 2611, MATH 3410)	3
EENG 3411 (coreq EENG 3410)	1
EENG Elective (note 1)	3
EENG Elective (note 1)	3
EENG 4910 (EENG 3810, 3811, 3910, 3920)	3
OPSM 3830	3
<i>Total Hours</i>	<i>16</i>

SPRING	Hrs.
EENG Elective (note 1)	3
EENG Elective (note 1)	3
EENG 4990 (EENG 4910)	3
MGMT 3850	3
<i>Total Hours</i>	<i>12</i>

Required prerequisite (s) indicated in parentheses

Notes:

Note 1: Must complete prerequisite (s) for each EENG Elective course.

Must earn at least a grade of “C” & a minimum 2.5 GPA in Communications Core, TECM 2700, MATH 1710, MATH 1720, PHYS 1710, PHYS 1730, EENG 1910 & EENG 2610 as foundations to enroll in advanced courses.

<p><i>Credits Which Could Be Earned Prior to Enrollment at UNT –AP, IB, CLEP, DC, Transfer:</i></p> <p>Communications Core TECM 2700 CHEM 1410, 1430 HIST 2610 HIST 2620 PSCI 2305 PSCI 2306 Creative Arts Core Language Philosophy Culture Core Social Behavioral Sciences Core</p>	<p><i>Credits Which Should Be Earned Prior to Enrollment at UNT –AP, IB, CLEP, DC, Transfer:</i></p> <p>MATH 1710 MATH 1720 PHYS 1710 & 1730 ENGR 1201 (EENG 1910)</p>
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This is an unofficial sample schedule. Requirements, prerequisites, etc. may change. Students should meet with an advisor each semester for individual scheduling, program decisions, etc. Engineering admissions requirements must be met & a degree audit must be created in order to progress in the program to a timely graduation.