The University of Texas at Austin
Chandra Department of Electrical and Computer Engineering
Cockrell School of Engineering

TEXAS McCombs | CANFIELD BUSINESS HONORS

2024-2026 Undergraduate Catalog — Suggested Arrangement of Courses
Electrical & Computer Engineering Honors / Canfield Business Honors

Suggested — Completion before college admission

M 408C (AP) Differential & Integral Calculus	**RHE 306** (AP) Rhetoric & Writing*	**HIS** (AP) US History*	**GOV 310L** (AP) American Government*	**ECO 304K** (AP) Intro to Microeconomics (SBS)	**E 316 L,M,N or P** (AP) Humanities Credit*
	Students may also complete PHY courses during summer semester between year 1 & 2	**PHY 303K** (AP) Engineering Physics I	**PHY 105M** Laboratory for PHY 303K	**PHY 303L** Engineering Physics 2	**PHY 105N** Laboratory for PHY 303L

Fall 1

ECE 302H *(Fall Only)* Introduction to Electrical Engineering Honors — Co-Req: M 408D	**ECE 306H** Introduction to Computing — Co-Req: M 408C	**M 408D** Seq, Series & Multivariable Calculus — Pre-Req: M 408C	**BA 101H** *(Fall Only)* Professional Dev & Career Planning Honors	**MAN 101H** *(Fall Only)* Leadership & Innovation Honors	**BA 324H** *(Wr)(Fall Only)* Business Communication — Pre-Req: RHE 306, Co-Req: BA 101H

Spring 1

ECE 319H *(Spring Only)* Introduction to Embedded Systems — Pre-Req: ECE 306H, Co-Req: ECE 312H	**ECE 312H** *(Spring Only)* Software Design & Implementation I — Pre-Req: ECE 306H, Co-Req: ECE 319H	**M 427J** Differential Equations — Pre-Req: M 408D	**MIS 301H** *(Spring Only)* Intro to Information Tech Mgmt Honors	**STA 301H** *(Spring Only)* Intro to Data Science Honors	**ECO 304L*** (AP) Intro to Macroeconomics* *Can be taken during summer semester, must be complete by Fall of year 2*

Fall 2

ECE 411H *(Fall Only)* Circuit Theory — Pre-Req: ECE 302H, PHY 303K, PHY 105M	**ECE 313H** *(Fall Only)* Linear Systems & Signals — Pre-Req: ECE 302H, M 427J, Co-Req: M 340L	**M 340L** Matrices & Matrix Calculations — Pre-Req: M 408C	**BAH 151H** Honors Lyceum — Pre-Req: BA 101H	**ACC 311H** Financial Accounting Honors — Pre-Req: 24 Hrs UT Credit, ECO 304K, MIS 301H	**STA 235H** *(Fall Only)* Data Science for Bus. Applications Honors — Pre-Req: M 408D, STA 301H
(also under ECE 313H) Co-Req: M 427J, PHY 303L, PHY 105N				Co-Req: BA 324H	

Spring 2

ECE 351H *(Spring Only)* Probability / Random Processes — Pre-Req: M 427J	**O M 235H** *(Spring Only)* Operations Management Honors — Pre-Req: ECO 304K, BA 324H, STA 301H	**ACC 312H** *(Spring Only)* Managerial Accounting Honors — Pre-Req: ACC 311H, BA 151H	**DS 235H** *(Spring Only)* Intro to Decision Science Honors — Pre-Req: M 408D, STA 301H	**UGS 302/3** First-Year Signature Course*	**VAPA** (AP) Visual & Performing Arts*

Fall 3

Advanced Tech Component	**Advanced Tech Component Math**	**Advanced Tech Component**	**FIN 357H** Business Finance Honors — Pre-Req: ECO 304K, Co-Req: ACC 312H, B 324H, STA 235H, DS 235H	**MAN 327H** *(Fall Only)* Entrepreneurship & Innovation Honors — Pre-Req: M 408D, Co-Req: BA 324H	

Spring 3

Advanced Tech Component Lab	**Advanced Tech Component**	**MAN 336H** Organizational Behavior Honors — Pre-Req: ACC 312H, Co-Req: BA 324H, P/S/A elective	**P/S/A Elective** Psychology/ Sociology/ Anthropology Elective* *statistics not accepted*	**MKT 337H** Principles of Marketing Honors — Pre-Req: BA 324H, ACC 312H, ECO 304L & K, STA 235H, D S 235H	

Fall 4

ECE 364D *(Wr)* Intro to Engineering Design — Pre-Req: BA 324H, Co-Req: Advanced Tech Component Lab; see tech core packet for course list	**Advanced Tech Component**	**LEB 323H** Business Law & Ethics Honors — Pre-Req: 4th year, ACC 312H, Co-Req: BA 324H	**GOV 312L/P** American Government*	**BA 353** Internship Credit (completed vvSummer prior) — Pre-Req: BA 324H	

Spring 4

ECE 464H Senior Design Project — Pre-Req: ECE 364D & Advanced Tech Component Lab	**Advanced Technical Elective** ECE upper division (3 hrs) or ECE 316 — Varies	**Advanced Tech Component**	**MAN 374H** Gen. Mgmt & Strategy Honors — Pre-Req: 4th year, FIN 357H, MAN 336H, MKT 337H, BA 353	**HIS** US History*	

Legend

Flag | Semester

ECE ### Course Title

Pre-Req | Co-Req

Pre-Requisite: need credit for (Grade of C- or better is required)

Co-Requisite: need credit for (Grade of C- or better is required) OR registration for

Pre-requisites and co-requisites are strictly enforced.

AP: AP Exam scores are elgible for credit. Visit bit.ly/UT-AP-IB-Scores

Core Curriculum

*Includes UGS 303 and various other courses common across all UT Austin degree plans.

Students recieve 2 Wr credits toward the core curriculum requirements from ECE 333T and ECE 364D.

Visit bit.ly/UTCoreList for the full list of requirements and accepted courses

Advanced Technical Component

7 courses* *ECB students only*

including an advanced math course & an advanced lab

Visit bit.ly/UTECE-techcores for the full list of advanced technical components & course sequences

Honors Requirements

16 hours

ECB students must complete 16 total hours of ECE Honors courses (such as ECE 302H, 319H, etc) Students may substitute up to 2 graduate-level advanced technical component electives taken for undergraduate credit to reach the 16 hour total. Courses must be approved by ECE Honors Advising

3.3 Engineering GPA
3.25 Business GPA

Advanced Technical Components

for Electrical & Computer Engineering Honors, Canfield Business Honors students

All ECE students specialize in one of the below areas starting in their junior year.
ECB students take 7 courses in their advanced technical component (or tech core).
You can declare as early as your first year and are welcome to change your mind!
Visit bit.ly/UTECE-techcores for the full list of advanced tech components in the Tech Core Packet and how to declare.
Don't forget, all ECE students also have to take the "**Advanced technical elective**" (see flowchart), which is an additional elective from any area below.

Electrical Engineering

Communications, Signal Processing, Networks & Systems
Required Math:
M 427L
3 Required ECE Courses:
- ECE 351M or ECE 325
- ECE 362K or ECE 371Q or ECE 360K
- ECE 445S (LAB) or ECE 471C (LAB)
+
3 Technical Electives

Electronics & Integrated Circuits
Required Math:
M 427L

4 Required ECE Courses:
- ECE 325   - ECE 438 (LAB)
- ECE 339   - ECE 316
+
2 Technical Electives

Energy Systems & Renewable Energy
Required Math:
M 427L

4 Required ECE Courses:
- ECE 325   - ECE 462L (LAB)
- ECE 368L or ECE 369 - ECE362K
+
2 Technical Electives

Fields, Waves & Electromagnetic Systems
Required Math:
M 427L

4 Required ECE Courses:
- ECE 325 - ECE 438(LAB) or ECE 462L (LAB) or ECE 368L/468L (LAB)
- ECE 339 - ECE 325K or ECE 363M
+
2 Technical Electives

Nanotechnology & Nanoelectronics
Required Math:
M 427L

3 Required ECE Courses:
- ECE 325   - ECE 440 (LAB)
- ECE 339
+
+3 Technical Electives

Computer Engineering

Computer Architecture & Embedded Systems
Required Math:
M 325K

4 Required ECE Courses:
- ECE 316   - ECE 445L (LAB)
- ECE 460N   - ECE 360C
+
2 Technical Electives

Data Science & Information Processing
Required Math:
M 325K

5 Required ECE Courses:
- ECE 461P   - ECE 351M
- ECE 360C   - ECE 460J (LAB)
- ECE 316 or ECE 445S or ECE471C
+
1 Technical Electives

Software Engineering & Design
Required Math:
M 325K

4 Required ECE Courses:
- ECE 422C   - ECE 461L (LAB)
- ECE 360C   - ECE 316 or ECE 445L
+
2 Technical Electives

Students are permitted to substitute graduate courses for undergraduate credit or other ECE courses for technical electives. Students must work with their faculty mentor and complete the ABET advising form to evaluate if the course will be accepted.

Approved graduate courses for undergraduate credit can also add to your honors hours total (see reverse). If you are missing more than 9 hours of honors credit,
please schedule a meeting with an ECE advisor to discuss your academic plans.

See the Tech Core packet and the academic policies page for more details. https://bit.ly/UTECE-Policies