

## Bachelor of Science in Engineering Technology in Control & Instrumentation (120 hours)

This is a recommended course sequence based on the UHD 2024-25 Undergraduate Catalog for a degree in Control and Instrumentation which equips students to apply modern instrumentation and control technologies to solve industrial process control problems. Courses with asterisks (\*) indicate Common Core courses.

		First	t Year		
Semester 1	Hours	Grade	Semester 2	Hours	Grade
ENG 1301* (Composition I)  P: A TSIA2 score meeting college readiness in Reading and Writing, or TSIA2 Reading and Writing complete, or TSIA2 Reading and Writing exempt	3		ENG 1302* (Composition II) P: A grade of C or better in ENG 1301 or placement by examination.	3	
EET 1411 (Electric Circuits w/Lab) P: MATH 1302, or enrollment in MATH 1505	4		MATH 2401* (Calculus I)  P: Agrade of C or better in MATH 1505 or placement by exam taken at UHD; Refer to catalog	<sub>n</sub> 4	
CHEM 1307/1107* (General	4		ENGR 1333 (Programming for Engineers)	3	
Chemistry I w/Lab) P: Credit or enrollment in MATH 1301 and CHEM 1107, ENG 1301 (or 010 core complete), and one year of high school chemistry or CHEM 1305/CHEM 1105			P: Completion of or enrollment in MATH 2401		
UHD First-year Seminar*	3		PHYS 1307/1107 (General Physics I	4	
Refer to catalog for approved options			W/Lab) P: Credit or enrollment in MATH 1302 or the equivalent, enrollment in PHYS 1107		
Total Hours	14		Total Hours	14	
		Secor	nd Year		
Semester 1	Hours	Grade	Semester 2	Hours	Grade
PHYS 1308/1108 (General Physics II	4		EET 2322/2122	4	
w/Lab) P: PHYS 1307 and credit or enrollment in PHYS 1108			(Analog Electronics / Lab) P: PHYS 1308/PHYS 1108, and a "C" or better in EET 1411; credit or enrollment in EET 2122		
POLS 2305* (Federal Government)	3		POLS 2306* (Texas Government)	3	
(Summer Option) P: Enrollment in or completion of ENG 1301 or 010 core complete.			(Summer Option) P: Enrollment in or completion of ENG 1301 or 010 complete.		
ENGR 2411 (Modern Methods of	4		Approved Language, Philosophy	', 3	
Engineering Analysis) or MATH 2402 (Calculus II) P. Refer to catalog			and Culture course* (Summer Option) P: Refer to catalog for approved options		
Approved Social & Behavioral Sciences Course* (Summer Option)	3		Approved CIET Lower Level Elective	3	
			Approved Oral Communication course*	3	
Total Hours	14		P: Refer to catalog for approved options  Total Hours	16	
	••	Sun	nmer		
EET 2332/2132 (Digital Fundamental P: Grade "C" or better in ENGR 1333 and EET 1411; credit	s/Lab) or enrollment i		4		

Third Year										
Semester 1	Hours	Grade	Semester 2	Hours	Grade					
EET 3335/3135 (Automation & Control /Lab) P: "C" or better in EET 2122/EET 2322, EET 2332/EET 2132 and MATH 2402 (or ENGR 2411) Credit or enrollment in EET 3135	4		ENGR 4306/4106 (Process Control Systems / Lab) P: C or better in ENGR 1333; EET 3335; MATH 2402 or ENGR 2411 Corequisite(s): ENGR 4106	4						
EET 3352/3152 (Measurement & Instrumentation / Lab) P: "C" or better in EET 2122/EET 2322 and credit or enrollment in EET3152	4		ENGR 3307 (Applied Thermo & Heat Transfer) P: CHEM 1307, PHYS 1307, and grade of C or better in ENGR 1333 and in one of ENGR 2411 or MATH 2402.	3						
ENGR 3332 (Engineering Communication and Ethics) P: ENG 1302 with grade of "C" or better, and Junior standing.	3		ENGR 3410 (Process Modeling and Simulation) P: CHEM 1307, PHYS 1307, and grade of C or better in ENGR 1333 and in one of ENGR 2411 or MATH 2402	4						
EET 3334 (Electrical Power Systems)  P: credit or enrollment in EET 2122/EET 2322	3		ENGR 4128 (CIET Senior Project Design) P: C or better in ENGR 1333, EET 3335/EET 3135 and EET 3352/EET 3152	1						
Approved American HistoryCourse* Refer to catalog for approved options	3		ENGR 4338 (Safety Instr. Systems) P: Grade "C" or better in EET 3435 and EET 3352/EET 3152	3						
Total Hours	17		Total Hours	15						
Fourth Year										
Semester 1										
	Hours	Grade	Semester 2	Hours	Grade					
ENGR 3308 (Fluid Mechanics) P: MATH 2401, PHYS 1307, and ENGR 2411	Hours 3	Grade	Semester 2 Approved CIET UL Elective	Hours 3	Grade					
ENGR 3308 (Fluid Mechanics)		Grade			Grade					
ENGR 3308 (Fluid Mechanics)  P: MATH 2401, PHYS 1307, and ENGR 2411  ENGR 4302/4102 (Process Design & Operation / Lab) P: Grade of C or better in ENGR 3410.	3	Grade	Approved CIET UL Elective  ENGR 3302 (Engineering Economics)	3	Grade					
ENGR 3308 (Fluid Mechanics)  P: MATH 2401, PHYS 1307, and ENGR 2411  ENGR 4302/4102 (Process Design & Operation / Lab) P: Grade of C or better in ENGR 3410. Corequisite(s): ENGR 4102  ENGR 4328 (Senior Project in CIET)	3	Grade	Approved CIET UL Elective  ENGR 3302 (Engineering Economics) P: ENGR 1333 and Junior Standing  Approved Creative Arts course* (Summer Option)	3	Grade					

15 to Finish
Fall: 15 hours • Spring: 15 hours

**30 in 3**Fall: 12 hours • Spring: 12 hours • Summer: 6 hours