

Critical Technological Studies (B.S.) – Engineering Track

2025-2026 Academic Catalog, Bachelor of Science – Critical Technological Studies, Engineering Track

Academic Core for B.S.

45 Hours

CHRISTIAN STUDIES		6
CSBS 1311	Engaging the Old Testament	3
CSBS 1312	Engaging the New Testament	3

ENGLISH		9
ENGL 1321	Rhetoric & Composition I	3
ENGL 1322	Rhetoric & Composition II	3
ENGL	Literature	3

A grade of a "C" or higher is required in ENGL 1321 and ENGL 1322.

EXERCISE & SPORT SCIENCE – SELECT TWO DIFFERENT COURSES		2
EXAC	Activity Course	1
EXAC	Activity Course	1

FINE ARTS – SELECT ONE		3
ARTS 1310	Drawing I	3
ARTS 1320	Design	3
ARTS 1350	Art Appreciation	3
ARTS 2360	Ceramics I	3
COMM 2335	Film Appreciation	3
FINA 2330	Exploring the Fine Arts	3
MUSI 1340	Music Appreciation	3
THEA 2350	Theatre Appreciation	3

WORLD CULTURES – SELECT ONE		3
ARTS 2354	World Art	3
EXSS 2353	Lifespan Nutrition	3
GLBL 2310	Cultural Immersion	3
HIST 1311	History of World Civilizations to 1500	3
HIST 1312	History of World Civilizations since 1500	3
HIST 2350	An Introduction to the Politics and Culture of Ancient Greece and Rome	3
HUMA 2355	Foundations of the Humanities	3
MUSI 2358	World Music	3
PHIL 2315	Introduction to Philosophy	3

LAB SCIENCE		8
	Laboratory Science Courses	8

PUBLIC SPEAKING		3
COMM 1320	Public Speaking	3

MATHEMATICS		4
MATH 1430	Calculus I	4

SOCIAL SCIENCE – SELECT ONE		3
BECO 2311	Principles of Macroeconomics	3
EDUC 2399	Child and Adolescent Development	3
PSYC 1301	General Psychology	3
SOCI 1311	Introduction to Sociology	3
SOCW 2311	Introduction to Social Work	3

US HISTORY OR US GOVERNMENT – SELECT ONE		3
HIST 2311	American History to 1877	3
HIST 2312	American History since 1877	3
POLS 2305	United States Government	3
POLS 2306	Texas State and Local Government	3

RESEARCH METHODS OR INTERNSHIP		
ENGR 4090	Practical Experience	-

FRESHMAN SEMINAR		1
UMHB 1101	Freshman Seminar	1

CHAPEL – 1 to 4 credits

UMHB 1002	Chapel
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Fine Arts Experience – 2 to 8 credits

UMHB 1005	Fine Arts Experience
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Critical Technological Studies

42 Hours

B.S. ENGINEERING TRACK REQUIRED COURSES 21

CISC 2330	Introduction to Object-Oriented Programming	3
CISC 3322	Web Development	3
ENGR 1310	Introduction to Engineering	3
ENGR 1320	Introduction to Engineering Fundamentals	3
ENGR 2320	Statics	3
ENGR 2345	Thermodynamics	3
ENGR 3360	Engineering for Humanity	3

REQUIRED HUMANITIES COURSES 9

HUMA 2355	Foundings	3
WRIT 3342	Advanced Grammar	3
WRIT 3344	Scientific Writing	3

VARIED ANALYSIS – SELECT ONE 3

COMM 2390	Introduction to Film Studies	3
ENGL	Literature	3

ORAL COMMUNICATION – SELECT ONE 3

COMM 3310	Persuasion	3
COMM 3325	Advanced Public Speaking	3

CULTURAL HUMANITIES – SELECT ONE 3

HUMA 2350	Origins	3
HUMA 2360	Explorations	3

PRACTICAL MEDIA SKILLS – SELECT ONE 3

COMM 3343	Documentary Filmmaking	3
COMM 4377	Narrative Film Production	3

Electives

33 Hours

UPPER LEVEL ELECTIVES 18

You need 18 additional hours to reach your minimum 36 UL required hrs.

ELECTIVES 15

You need 15 additional hours to reach your minimum 120 required hrs.

Total Hours

Academic Core for B.S.	45
B.S. Critical Technological Studies Required Courses	42
Upper Level Electives	18
Electives	15
Total hours required for graduation	120

Additional Graduation Requirements

Minimum Upper Level hours	36
Minimum hours taken at UMHB	30
Minimum Upper Level hours taken at UMHB	24
Minimum cumulative GPA	2.0

Critical Technological Studies (B.S.) – Engineering

2025-2026 Academic Catalog, Bachelor of Science – Critical Technological Studies – Engineering – DEGREE SEQUENCE

FRESHMAN FALL 15 Hours

ENGL 1321	Rhetoric & Composition I*	3
	Lab Science (PHYS 2421 recommended)	4
MATH 1430	Calculus I	4
ENGR 1310	Introduction to Engineering	3
UMHB 1101	First Year Seminar	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

FRESHMAN SPRING 15 Hours

ENGL 1322	Rhetoric & Composition II*	3
	Lab Science (PHYS 2422 recommended)	4
	Elective (MATH 2430 recommended)	4
ENGR 1320	Intro to Engineering Fundamentals	3
EXAC	Activity Course	1
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

SOPHOMORE FALL 15 Hours

ENGL	Literature*	3
ENGR 2320	Engineering Mechanics: Statics	3
CISC 2330	Introduction to Object-Oriented Programming	3
COMM 1320	Public Speaking**	3
CSBS 1311	Old Testament	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

SOPHOMORE SPRING 15 Hours

ENGR 2345	Engineering Thermodynamics	3
	Fine Arts	3
	Social Science	3
CSBS 1312	Engaging the New Testament	3
	US History or US Government	3
UMHB 1002	Chapel	0
UMHB 1005	Fine Arts Experience	0

JUNIOR FALL 15 Hours

HUMA 2355	Foundings	3
	ENGL Literature or COMM 2390	3
WRIT 3342	Advanced Grammar	3
	Minor/Elective***	6
UMHB 1005	Fine Arts Experience	0

JUNIOR SPRING 15 Hours

	HUMA 2350 or HUMA 2360	3
CISC 3322	Web Development	3
WRIT 3344	Scientific Writing	3
	Minor/Electives***	6
UMHB 1005	Fine Arts Experience	0

SENIOR FALL 15 Hours

EXAC	Activity Course	1
ENGR 3360	Engineering for Humanity	3
	COMM 3310 or 3325	3
	Minor/Electives***†	8
UMHB 1005	Fine Arts Experience	0

SENIOR SPRING 15 Hours

ENGR 4090	Practical Experience – to be taken last semester	0
	World Cultures	3
	COMM 3343 or COMM 4377	3
	Minor/Electives***†	9
UMHB 1005	Fine Arts Experience	0

Total Credit Hours: 120

* Prerequisites for upper-level English and WRIT courses.

** Prerequisite for upper-level COMM courses.

*** If no minor declared, fulfill with electives

† If possible, Majors are strongly recommended taking WRIT 4192-4492.

A major in Critical Technological Studies consists of 42 semester hours. Students must maintain a GPA of 2.0 or better for courses in the major