



We are excited about your interest in transferring to UTA! Please check out our interactive online transfer tool – [Maverick Transfer Track](#) – to track your progress toward your degree utilizing your transfer credits.

The Department of Computer Science and Engineering offers three programs of study leading to the bachelor's degree: The Bachelor of Science in Computer Science, the Bachelor of Science in Computer Engineering, and the Bachelor of Science in Software Engineering.

In all three programs of study, design experiences are included throughout the first three years of the curriculum and culminate in a major team-oriented project in the senior year that approximates an industrial work experience. All programs strive to provide students with opportunities to interface with the profession through avenues such as cooperative education programs, professional society activities, plant trips, special projects, and industry speakers' programs.

GENERAL CORE REQUIREMENTS – BACHELOR OF SCIENCE IN COMPUTER SCIENCE

Select two of the following:

6

UTA COURSE	UTA COURSE TITLE	TCC COURSE
COMS 1301	FUNDAMENTALS OF PUBLIC SPEAKING	SPCH 1311
COMS 2302	PROFESSIONAL AND TECHNICAL COMMUNICATION FOR SCIENCE AND ENGINEERING	N/A
ENGL 1301	RHETORIC AND COMPOSITION I	ENGL 1301
ENGL 1302	RHETORIC AND COMPOSITION II	ENGL 1302
Total Hours		6

CREATIVE ARTS

Select one of the following:

3

UTA COURSE	UTA COURSE TITLE	TCC COURSE
ARCH 1301	INTRODUCTION TO ARCHITECTURE AND INTERIOR DESIGN	N/A
ART 1301	ART APPRECIATION	ARTS 1301
ART 1309	ART OF THE WESTERN WORLD I: GREECE THROUGH RENAISSANCE	ARTS 1303
ART 1310	ART OF THE WESTERN WORLD II: BAROQUE TO MODERN	ARTS 1304
DNCE 1300	DANCE APPRECIATION	DANC 2303
MUSI 1300	MUSIC APPRECIATION	MUSI 1306
THEA 1342	THEATRE AND FILM APPRECIATION	N/A
THEA 1343	INTRODUCTION TO THEATRE	DRAM 1310
MUSI 1302	JAZZ APPRECIATION	N/A
MUSI 2300	INTRODUCTION TO WORLD MUSIC	N/A
MUSI 2301	APPRECIATION OF MUSIC IN FILM	N/A
Total Hours		3

GOVERNMENT/POLITICAL SCIENCE

UTA COURSE	UTA COURSE TITLE	TCC COURSE
POLS 2311	GOVERNMENT OF THE UNITED STATES	GOVT 2305
POLS 2312	STATE AND LOCAL GOVERNMENT	GOVT 2306
Total Hours		6

LANGUAGE, PHILOSOPHY AND CULTURE

Select one of the following:

3

UTA COURSE	UTA COURSE TITLE	TCC COURSE
ANTH 2322	GLOBAL CULTURES	ANTH 2351
ARAB 2310	ARABIC CULTURE IN THE WORLD	N/A
ARAB 2314	INTERMEDIATE ARABIC II	N/A
ARCH 2300	MASTERWORKS OF WESTERN ARCHITECTURE	N/A
ART 1317	THE ART OF NONWESTERN TRADITIONS	N/A
CHIN 2310	CHINESE CULTURE IN THE WORLD	N/A
CHIN 2314	INTERMEDIATE CHINESE II	CHIN 2312
ENGL 2303	TOPICS IN LITERATURE	ENGL 2341
ENGL 2309	WORLD LITERATURE	N/A

FREN 2310	FRENCH AND FRANCOPHONE CULTURES IN THE WORLD	N/A
FREN 2314	INTERMEDIATE FRENCH II	FREN 2312
GERM 2310	GERMAN CULTURE IN THE WORLD	N/A
GERM 2314	INTERMEDIATE GERMAN II	GERM 2312
GLOBAL 2301	INTRODUCTION TO GLOBAL ISSUES	N/A
INTS 1310	INTRODUCTION TO POPULAR CULTURE	N/A
MAS 2300	INTRODUCTION TO MEXICAN AMERICAN STUDIES	HUMA 1305
KORE 2310	KOREAN CULTURE IN THE WORLD	N/A
KORE 2314	INTERMEDIATE KOREAN II	N/A
LING 2371	LANGUAGE IN A MULTICULTURAL USA	N/A
PHIL 2300	INTRODUCTION TO PHILOSOPHY	PHIL 1301
PORT 2314	INTERMEDIATE PORTUGUESE II	N/A
SOCI 1310	INTRODUCTION TO POPULAR CULTURE	N/A
RUSS 2310	RUSSIAN CULTURE IN THE WORLD	N/A
RUSS 2314	INTERMEDIATE RUSSIAN II	N/A
SPAN 2310	HISPANIC CULTURE IN THE WORLD	N/A
SPAN 2314	INTERMEDIATE SPANISH II	SPAN 2312
PHIL 1304	CONTEMPORARY MORAL PROBLEMS	N/A
CLAS 1300	INTRODUCTION TO CLASSICAL MYTHOLOGY	N/A
LATN 2314	LATIN LEVEL IV	N/A
HIST 2377	FLIGHT CULTURE AND THE HUMAN EXPERIENCE	N/A
Total Hours		3

LIFE AND PHYSICAL SCIENCE

Select two of the following:		6
<u>UTA COURSE</u>	<u>UTA COURSE TITLE</u>	<u>TCC COURSE</u>
BIOL 1441	CELL AND MOLECULAR BIOLOGY	BIOL 1406
BIOL 1442	EVOLUTION AND ECOLOGY	BIOL 1407
CHEM 1441	GENERAL CHEMISTRY I	CHEM 1411
PHYS 1441	GENERAL COLLEGE PHYSICS I	PHYS 1401
PHYS 1442	GENERAL COLLEGE PHYSICS II	PHYS 1402
Total Hours		6

MATHEMATICS

Select two of the following:		6
<u>UTA COURSE</u>	<u>UTA COURSE TITLE</u>	<u>TCC COURSE</u>
MATH 1302	COLLEGE ALGEBRA	MATH 1314
MATH 1303	TRIGONOMETRY	MATH 1316
Total Hours		6

SOCIAL AND BEHAVIORAL SCIENCES

Select one of the following:		3
<u>UTA COURSE</u>	<u>UTA COURSE TITLE</u>	<u>TCC COURSE</u>
AAST 2300	INTRODUCTION TO AFRICAN AMERICAN STUDIES	N/A
ANTH 1306	INTRODUCTION TO ANTHROPOLOGY	ANTH 2346
CRCJ 2334	INTRODUCTION TO THE CRIMINAL JUSTICE SYSTEM	CRIJ 1301
ECON 2305	PRINCIPLES OF MACROECONOMICS	ECON 2301
ECON 2306	PRINCIPLES OF MICROECONOMICS	ECON 2302
ECON 2337	ECONOMICS OF SOCIAL ISSUES	N/A
FINA 2330	MONEY, FINANCE AND THE MODERN CONSUMER	N/A
GEOG 2302	HUMAN GEOGRAPHY	GEOG 1302
GEOG 2303	WORLD REGIONAL GEOGRAPHY	GEOG 1303
IE 2308	ECONOMICS FOR ENGINEERS	N/A
KINE 2350	PUBLIC HEALTH: PRINCIPLES AND POPULATIONS	N/A
LING 2301	INTRODUCTION TO THE STUDY OF HUMAN LANGUAGE	N/A
MANA 2302	COMMUNICATIONS IN ORGANIZATIONS	N/A
PSYC 1315	INTRODUCTION TO PSYCHOLOGY	PSYC 2301
SOCI 1311	INTRODUCTION TO SOCIOLOGY	SOCI 1301
SOCI 2312	SOCIAL PROBLEMS	SOCI 1306
SOCW 2302	LIFE SPAN DEVELOPMENT AND HUMAN BEHAVIOR	N/A
SOCW 2361	INTRODUCTION TO SOCIAL WORK	N/A
Total Hours		3

U.S. HISTORY

<u>UTA COURSE</u>	<u>UTA COURSE TITLE</u>	<u>TCC COURSE</u>
HIST 1301	HISTORY OF THE UNITED STATES TO 1865	HIST 1301

HIST 1302	HISTORY OF THE UNITED STATES, 1865 TO PRESENT	HIST 1302
Total Hours		6

FOUNDATIONAL COMPONENT AREA OPTION

Any course listed in the General Core Requirements. A course may only fulfill one component area.

3

Total Hours

3

Core Curriculum

General Core Requirements		
CORE REQUIREMENTS FOR BACHELOR OF SCIENCE IN COMPUTER SCIENCE		
UTA COURSE	UTA COURSE TITLE	TCC COURSE
ENGL 1301	RHETORIC AND COMPOSITION I	ENGL 1301
ENGL 1302	RHETORIC AND COMPOSITION II	ENGL 1302
COMS 2302	PROFESSIONAL AND TECHNICAL COMMUNICATION FOR SCIENCE AND ENGINEERING	3 Hours
Language, Philosophy & Culture ¹		3 Hours
Foundational Component Area		3 Hours
Political Science (Government)		
POLS 2311	GOVERNMENT OF THE UNITED STATES	GOVT 2305
POLS 2312	STATE AND LOCAL GOVERNMENT	GOVT 2306
US History		
HIST 1301	HISTORY OF THE UNITED STATES TO 1865	HIST 1301
HIST 1302	HISTORY OF THE UNITED STATES, 1865 TO PRESENT	HIST 1302
Creative Arts ¹		3 Hours
Social & Behavioral Sciences		3 Hours
Mathematics		
MATH 1426	CALCULUS I	MATH 2413
MATH 1308	ELEMENTARY STATISTICAL ANALYSIS	MATH 1342
Life and Physical Science (Biology recommended)		
PHYS 1443	GENERAL TECHNICAL PHYSICS I	PHYS 2425
PHYS 1444	GENERAL TECHNICAL PHYSICS II	PHYS 2426
One of the following:		1 Hour
UNIV 1131 or ENGR 1101	STUDENT SUCCESS or ENTRANCE TO ENGINEERING FOR TRANSFER STUDENTS	1 Hours
PRE-PROFESSIONAL COURSES		
ENGR 1250 Or ENGR 1251	PROBLEM SOLVING IN ENGINEERING or PROBLEM SOLVING IN ENGINEERING FOR PRECALCULUS STUDENTS	2 Hours
MATH 1426	CALCULUS I	MATH 2413
MATH 2425	CALCULUS II	MATH 2414
PHYS 1443	GENERAL TECHNICAL PHYSICS I	PHYS 2425
PHYS 1444	GENERAL TECHNICAL PHYSICS II	PHYS 2426
ENGL 1301	RHETORIC AND COMPOSITION I	ENGL 1301
CSE 1205	INTRODUCTION TO COMPUTER SCIENCE AND ENGINEERING	2 Hours
CSE 1310	INTRODUCTION TO COMPUTERS & PROGRAMMING	3 Hours
CSE 1320	INTERMEDIATE PROGRAMMING	3 Hours
CSE 1325	OBJECT-ORIENTED PROGRAMMING	3 Hours
CSE 2312	COMPUTER ORGANIZATION & ASSEMBLY LANGUAGE PROGRAMMING	3 Hours
CSE 2315	DISCRETE STRUCTURES	3 Hours
CSE 3318	ALGORITHMS & DATA STRUCTURES	3 Hours
PROFESSIONAL COURSES ²		
IE 3301 or MATH 3313	ENGINEERING PROBABILITY INTRODUCTION TO PROBABILITY	3 Hours
CSE 3302	PROGRAMMING LANGUAGES	3 Hours
CSE 3310	FUNDAMENTALS OF SOFTWARE ENGINEERING	3 Hours
CSE 3315	THEORETICAL CONCEPTS IN COMPUTER SCIENCE AND ENGINEERING	3 Hours
CSE 3320	OPERATING SYSTEMS	3 Hours
CSE 3330	DATABASE SYSTEMS AND FILE STRUCTURES	3 Hours
CSE 3380 or MATH 3330	LINEAR ALGEBRA FOR CSE or INTRODUCTION TO LINEAR ALGEBRA AND VECTOR SPACES	3 Hours
CSE 4308	ARTIFICIAL INTELLIGENCE	3 Hours
CSE 4314	PROFESSIONAL PRACTICES	3 Hours
CSE 4316	COMPUTER SYSTEM DESIGN PROJECT I	3 Hours
CSE 4317	COMPUTER SYSTEM DESIGN PROJECT II	3 Hours
CSE 4344	COMPUTER NETWORK ORGANIZATION	3 Hours
Select one of the following:		3 Hours

CSE 4303	COMPUTER GRAPHICS	
CSE 4305	COMPILERS FOR ALGORITHMIC LANGUAGES	
CSE 4360	AUTONOMOUS ROBOT DESIGN AND PROGRAMMING	
Select one of the following:		3 Hours
CSE 4380	INFORMATION SECURITY	
CSE 4381	INFORMATION SECURITY II	
CSE 4382	SECURE PROGRAMMING	
Approved Mathematics elective ²		3 Hours
Approved Technical electives ²		12 Hours
Total Hours		123

- 1 All pre-professional courses must be completed with a C or better before enrolling in professional courses
- 2 A list of acceptable electives is available from the departmental office or Web site.
- 3 All prerequisites for professional courses must be completed with a C or better