TRANSFER PROGRAMS and resources

GETTING STARTED AT CCCCD

Collin County Community College adheres to various policies that are designed to make transfer easy, such as a state-honored core curriculum, a statewide Guarantee for Transfer program, and participation in the Texas Common Course Numbering System.

CORE CURRICULUM[1]

The Texas Education Code, as a result of Senate Bill 148, requires all public colleges and universities to have a core curriculum. Core curriculum is defined as "the curriculum in the liberal arts, humanities, sciences, and political, social, and cultural history that all undergraduate students of a particular Texas institution of higher education are required to complete before receiving an associate or bachelor's degree."

The purpose of the core curriculum is to provide the skills, knowledge, and perspectives that help define the educated person. The courses included in the core curriculum will contribute to the acquisition of these skills perspectives and to a basic core of knowledge.

The core curriculum is predicated on a series of basic intellectual competencies—reading, writing, speaking, listening, critical thinking, and computer literacy—that are essential to the learning process in any discipline. Although students can be expected to come to college with some experience in exercising these competencies, they often need further instruction and practice to meet college standards and, later, to succeed in both their major field of academic study and their chosen career or profession.

CCCCD will designate core curriculum courses completed by a student on the official CCCCD transcript. If a student satisfies all component areas, the message "Core Curriculum Completed" will appear on the transcript.

Students should visit with an academic advisor to ensure that they take the correct courses for their Associate of Arts or Associate

COLLIN COUNTY COMMUNITY COLLEGE DISTRICT

of Science degree program at CCCCD in addition to the major for their chosen transfer college or university.

Students must complete a minimum of 60 credit hours with a cumulative (overall) grade point average of 2.0 or better and pass all sections of TASP in order to graduate with an associate degree in the state of Texas.

CCCCD's common core curriculum of 45 credit hours, graduation requirement of 3 credit hours, and electives/area of emphasis of 12 hours follows:

Communications **9 credit hours**

English 6 credit hours

ENGL 1301 and 1302

Speech – *Select one course*: 3 credit hours

SPCH 1311 or 1315

Humanities **3 credit hours**

Select one course:

ANTH 2351

ENGL 2322, 2323, 2327, 2328, 2332, 2333, 2342, or 2343

FREN 2303 or 2304

HUMA 1301

PHIL 1301, 1304, 2303, 2306, or 2307

SPAN 2321 or 2322

Mathematics **3 credit hours**

Select one course:

MATH 1314/1414*, 1316*, 1324, 1325, or 1342*

(or higher level course as determined by student's area of emphasis)

Natural Sciences **8 credit hours**

Select two courses (course sequence recommended):

BIOL 1406*, 1407*, 1408, 1409, or 1411*

CHEM 1405, 1407, 1411*, or 1412*

ENVR 1401*

GEOL 1401, 1403*, or 1404*

PHYS 1401*, 1402*, 1411, 2425*, or 2426*

Social/Behavioral Sciences **3 credit hours**

Select one course:

PSYC 2301 or SOCI 1301

Social Sciences **12 credit hours**

Legislative Mandate – Students must take BOTH of the following courses:

GOVT 2301 (Texas) and GOVT 2302 (U.S.)

Legislative Mandate – Students must take TWO of the following courses:

HIST 1301, 1302, or 2301

Visual/Performing Arts **3 credit hours**

Select one course:

ARTS 1301, 1303, or 1304

DRAM 1310

MUSI 1306 or 1307

Institutional Options **4 credit hours**

Students must select one course in each of the following areas:

COSC 1300 (or higher level course as determined by student's area of emphasis)

Any PHED/DANC Activity Course (1 credit hour)

AA/AS Core Curriculum	**45 credit hours**
AA/AS Requirement**	**3 credit hours**
Electives/Areas of Emphasis2	**12 credit hours min.**
Total	**60 credit hours minimum**

NOTES:

[1] *Some courses in the core curriculum may require prerequisites. Please check course descriptions in the back of this catalog.*

[2] *In order to complete an area of emphasis, students must complete 12 credit hours of recommended electives.*

To complete an Associate of Arts degree:

**1. One sophomore Literature course (3 credit hours) is required for graduation.

2. Students may select any of the Mathematics and Natural Sciences courses listed above.

To complete an Associate of Science degree:

**1. One additional Mathematics course (3 credit hours) is required for graduation. Students must choose a Mathematics course marked with an asterisk (*).

2. Students must select from Mathematics and Natural Sciences courses marked with an asterisk (*).

FIELDS OF STUDY

Mandated in Senate Bill 148, the Fields of Study curricula are intended to facilitate the transferability of lower-division courses among Texas public colleges and universities. Field of Study courses are defined by SB 148 as, "a set of courses that will satisfy the lower-division requirements for a bachelor's degree in a specific academic major at a general academic teaching institution." Receiving institutions may not require incoming transfer students to repeat courses with the same content as Field of Study courses. CCCCD offers Fields of Study curricula for the Business, Computer Science, Criminal Justice, Education, Engineering, Engineering Technology, Music, and Nursing areas of emphasis. Refer to the specific Fields of Study curriculum in the Associate of Arts and Associate of Science sections of this catalog.

GUARANTEE FOR TRANSFER CREDIT

CCCCD guarantees to its students who have met the requirements for its Associate of Arts/Associate of Science degree and students who have met the 60 credit-hour transfer plan the

NOTE: The second digit in a course number indicates the number of credit hours for that course.

transferability of those course credits to the Texas colleges and/or universities that participate in the Guarantee for Transfer Credit program. This guarantee is designed for CCCCD students who have made firm decisions about their major, the transfer college or university to which they plan to transfer, and have followed a written transfer guide for that transfer institution.

If these courses are rejected, a student may take tuition-free alternate courses at CCCCD that are deemed acceptable by the college or university to which he/she wishes to transfer. Special conditions that apply to the guarantee program are available on request.

COMMON COURSE NUMBERING

To help meet the transfer needs of its students, CCCCD is a member of the Texas Common Course Numbering System Consortium. All Texas community/junior colleges and many Texas universities are also using this numbering system.

The Texas Common Course Numbering System provides a shared, uniform set of course designations for students and their advisors to use in determining both course equivalency and degree applicability of transfer credit on a statewide basis.

Students should not assume that only courses with common course numbers will transfer and should see a CCCCD academic advisor for assistance.

CONCURRENT ADMISSIONS AGREEMENTS

Southern Methodist University

University Of North Texas

University Of Texas At Dallas

The Concurrent Admission Agreements allow qualified CCCCD students the opportunity to complete freshman and sophomore requirements for Southern Methodist University, the University of North Texas or the University of Texas at Dallas while enrolled at CCCCD.

Concurrent admissions will lower costs, making college more affordable and accessible. Students will complete the first two years of their bachelor's degrees and pay CCCCD's tuition rates.

CCCCD students participating in the concurrent admissions programs will be rewarded for pursuing an academically rigorous program of study. They will be eligible for prestigious university scholarships and will receive recognition for completing honors courses at CCCCD.

These agreements extend select SMU, UNT, and UTD student privileges, such as access to the libraries as well as cultural and athletic events, to CCCCD students.

For more information about concurrent admissions, please call 972.881.5710.

DUAL OPPORTUNITIES AGREEMENTS

Collin County Community College District

Dallas County Community College District (DCCCD):

Collin County residents may enroll in select Workforce Education (WECM) programs offered by the DCCCD at in-county tuition rates. Likewise, Dallas County residents may enroll in select Workforce Education programs offered by CCCCD. For more information contact the Registrar's Office at SCC-972.881.5710, PRC-972.377.1744, or CPC-972.548.6710.

TRANSFER PROGRAMS

The ultimate goal of Collin County Community College District is to produce educated and productive students, knowledgeable in their chosen field of study. CCCCD has partnered with various colleges and universities to establish transfer articulation agreements, concurrent admission agreements and degree plans to provide students with access to and linkages with their baccalaureate degree-granting institutions. Not only do these partnerships allow courses to transfer from one institution to another without misrepresentation or loss of credit; they foster a more confident and successful student.

TRANSFER RESOURCES AT CCCCD

Transfer services and resources are available to CCCCD students to help ensure easy transfer of course credits from CCCCD to the college or university of their choice. Some of the resources include individual assistance from academic advisors, Transfer Express, and the Transfer Labs.

Academic Advisors

Students planning to transfer Collin County Community College coursework to another college or university should contact an academic advisor. Students planning to earn associate degrees are also encouraged to contact an academic advisor. Academic advisors help students define short- and long-term transfer goals and assist with course selections. CCCCD academic advisors are located at each campus in the Student Development Center.

Transfer Express Program

During the spring semester, Collin County Community College hosts Transfer Express, a free program designed for CCCCD students who plan to transfer courses to other colleges and universities.

Transfer Express enables students to compare various schools without traveling to their campuses. Representatives from many well-known state colleges and universities are present to offer students valuable information including transferability of courses, academic programs, student activities, housing, and financial aid.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

All students interested in transfer information are encouraged to attend Transfer Express. For more information, please contact the New Student Programs Office at 972.377.1750.

Transfer Labs

Transfer Labs are located at CPC, PRC, SCC, and CCCCD@ALLEN. Students are provided with various transfer resources to help them transfer easily into the college or university of their choice. Transfer Lab resources include:

- Individual Assistance
- Library of catalogs for Texas and out-of-state colleges and universities
- College and university resource materials, including general and specific transfer information, applications, and degree plans
- "College Search" computer
- General transfer of credit information
- Reference Books and Publications
  - College Handbook
  - College Cost and Financial Aid Handbook
  - Index of Majors and Graduate Degrees
  - International Student Handbook
  - Profiles of American Colleges
  - A Guide to Higher Education in North Texas
  - "Planning Today for Transferring Tomorrow" brochure
  - "Selected Basic Transfer Courses" handout
  - "Questions for Students Planning to Transfer" handout
  - Course Equivalency Notebook–listing equivalencies for CCCCD and various colleges and universities
  - Degree plans and transfer guides with CCCCD equivalencies for colleges and universities
  - Directory listing addresses, phone numbers, application deadlines, and transfer admission requirements for the most-requested transfer colleges and universities
  - Transfer scholarship information

NOTE: It is the responsibility of the student to check with the college or university to which they plan to transfer for all requirements. The student should know admissions policies, specific department requirements, deadlines, and courses that will satisfy specific degree requirements.

Tips for Transfer Students

- Check with the college or university for deadlines and fees. Make sure to meet all deadlines.
- Keep detailed records of all contacts and make copies of all documents sent to the college or university.
- Generally only credits (semester hours) transfer; grade point average (GPA) is used for admission to the college/university and admission to certain programs and/or specific degrees.
- Check with the college/university for GPA information. A minimum GPA of 2.0 (a "C" average) is required at most colleges and universities
- Attend orientation if it is available.
- Try not to carry too many credit hours during the first semester transfered especially if students plan to work.
- The first semester GPA is very important.
- Get involved – find an organization that sounds interesting and join the fun.

TRANSFER GUIDES AND ARTICULATION AGREEMENTS WITH COLLEGES & UNIVERSITIES

CCCCD has transfer guides and articulation agreements with the following colleges and universities. For details, please visit the Transfer Lab (located in the Student Development Center on each campus) to meet with an academic advisor.

Baylor University
Dallas Baptist University
Hardin-Simmons University
LeTourneau University
Midwestern State University
Sam Houston State University
Southeastern Oklahoma State University
Southern Methodist University
Southwest Texas State University
Stephen F. Austin State University
Tarleton State University
Texas A&M University - College Station
Texas A&M University - Commerce
Texas A&M University - Kingsville
Texas Christian University
Texas Tech University
Texas Woman's University
University of Arkansas - Fayetteville
University of California - Northridge
University of Houston
University of North Texas
University of Oklahoma
University of Texas - Arlington
University of Texas - Austin
University of Texas - Dallas
University of Texas Southwestern Medical Center of Dallas
West Texas A&M University

Although officials at the various senior institutions have reviewed the information on these guides, the content is subject to change; therefore, it is the responsibility of the student to verify with the college or university of their choice the applicability of transfer information.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

RESOLUTION OF TRANSFER DISPUTES

CCCCD works closely with colleges and universities to make the transfer process as smooth as possible for courses transferred to CCCCD from the other institutions and follows guidelines to resolve transfer disputes.

The Texas Higher Education Coordinating Board has established procedures (see below) to be followed when transfer credit for lower-division courses listed in the Academic Course Guide Manual (ACGM) is disputed. The individual courses covered by this procedure are defined in the Coordinating Board's guide entitled, "Transfer of Credit Policies and Curricula."

RESOLUTION OF TRANSFER DISPUTES FOR LOWER-DIVISION COURSES

The following procedures shall be followed by public institutions of higher education in the resolution of credit transfer disputes involving lower-division courses.

1. If an institution of higher education does not accept course credit earned by a student at another institution of higher education, the receiving institution shall give written notice to the student and to the sending institution that transfer of the course is denied. The receiving institution will also give the reasons for denying credit for a particular course or set of courses at the request of the sending institution.
2. The two institutions and the student shall attempt to resolve the transfer of the course credit in accordance with Board rule and/or guidelines.
3. If the transfer dispute is not resolved to the satisfaction of the student or the sending institution within 45 days after the date the student received written notice of denial, the institution whose credit is denied for transfer shall notify the commissioner of the denial.
4. The Commissioner of Higher Education or the Commissioner's designee shall make the final determination about the dispute concerning the transfer of course credit and give written notice of the determination to the involved student and institutions.

DEGREE OPTIONS FOR TRANSFER STUDENTS

CCCCD offers a variety of plans designed to prepare students for a college or university degree. Some options include pursuing an associate degree, completing the core curriculum or a Field of Study, or participating in a pre-professional program.

CHOOSING A CATALOG YEAR

Students who plan to transfer to a college or university have a choice to make regarding their requirements for graduation. Specifically, they may choose the catalog year under which they wish to graduate. This choice is subject to restrictions that are outlined in the college or university catalog. Students should consult their CCCCD academic advisor or the catalog of their choice to learn about any limitations.

Students who plan to transfer should keep a copy of the CCCCD Catalog from the year they choose, the college or university's catalog, and the transfer guide that was valid at the time they enrolled in CCCCD and selected a major. Course syllabi should also be kept.

ASSOCIATE OF ARTS AND ASSOCIATE OF SCIENCE DEGREES

The Associate of Arts and Associate of Science degrees are designed for students planning to transfer course credits to a baccalaureate degree program at a college or university. The curriculum suggested in this catalog will satisfy the requirements of most colleges and universities. Students must consult the catalog of the college or university to which they plan to transfer. Students, working with an academic advisor, should use these catalogs in planning their academic program. The selection of science, math, and elective credit courses is often based on the requirements of the specific transfer college or university.

Current college/universities catalogs, transfer guides/ guaranteed programs, and all transfer information are available in the CCCCD Transfer Lab located at each campus in the Student Development Center.

The Associate of Arts and Associate of Science degrees are awarded to students who meet the following requirements along with graduation requirements listed on pages 49-69.

1. Earn a minimum of 60 credit hours (excluding developmental credit).
2. Complete the Core Curriculum of 45 credit hours.
3. Complete a minimum of 12 credit hours of recommended electives/areas of emphasis beginning on this page.
4. Complete the additional 3-credit hour course required for the Associate of Arts or Associate of Science degree.
5. Earn a minimum of 18 credit hours in residency at CCCCD.
6. Earn a minimum cumulative GPA of 2.0.

Coordinators for disciplines and programs not listed in the Associate of Arts, Associate of Science and Associate of Applied Science areas of emphasis are listed below:

TRANSFERABLE AREAS

Chinese, Italian, Japanese, Russian
Shirley McBride . . . . . .SCC-B193 . . . . . .972.881.5675
Humanities
Joanne Stevens . . . . . .SCC-J218 . . . . . .972.881.5129
Social Work
Debbie White . . . . . .SCC-H221 . . . . . .972.881.5163

NOTE: The second digit in a course number indicates the number of credit hours for that course.

NON-TRANSFERABLE AREAS

Academic and Personal Enhancement
Linda Qualia . . . . . .SCC-K105 . . . . . .972.881.5779
Developmental Mathematics
Eugene Foley . . . . . .SCC-J237 . . . . . .972.881.5924
Developmental Reading
Marilyn Rice . . . . . .CPC-A308 . . . . . .972.548.6578
Developmental Writing
Myrtle Hightower . . . . . .SCC-H220 . . . . . .972.516.5042
English as a Second Language (ESL)
Donald Weasenforth . . . . .SCC-I207 . . . . . .972.881.5970

AREA OF EMPHASIS FOR THE ASSOCIATE OF ARTS DEGREE

The Associate of Arts degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities, and to ensure enrollment in appropriate courses, students should verify course transferability with a CCCCD academic advisor and/or the college or university that they plan to attend.

ACCOUNTING

See Business on page 50.

AMERICAN SIGN LANGUAGE (DEAF EDUCATION)

60 credit hours

Program Coordinator:

Henry Whalen . . . . . .SCC-B135 . . . . . .972.881.5152
(TTY) 972.881.5138

Academic Advisor:

Tori Hoffman . . . . . .PRC F142 . . . . . .972.377.1779

The Associate of Arts degree with an emphasis in American Sign Language (Deaf Education) provides general academic courses and electives that enable students who intend to major in Deaf Education or Deaf Studies to transfer to a college or university.

The American Sign Language emphasis is designed to provide students with essential, foundational ASL skills, familiarity with Deaf Culture, and an introduction to the discipline of education.

Contact Program Coordinator regarding 2+2 Program with Texas Woman's University.

Career Opportunities

Students selecting ASL as their emphasis at CCCCD may transfer into a college or university program. There is a dire shortage of teachers nationwide, and entry-level positions are available.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours

See page 45.

Recommended Electives **12 credit hours**

SGNL	1401	American Sign Language (ASL): Beginning I	.4
SGNL	1402	American Sign Language (ASL): Beginning II	.4
SGNL	2301	American Sign Language (ASL): Intermediate I	.3
SGNL	2302	American Sign Language (ASL): Intermediate II[1]	3
EDUC	1301	Introduction to Education[2]	.3
EDUC	2301	Introduction to Special Education[2]	.3
SLNG	1311	Fingerspelling [1,]*	.3
SLNG	1447	Deaf Culture *	.4

[1] Recommended for students pursuing degrees in Deaf Studies
[2] Recommended for students pursuing degrees in Deaf Education
* Students should verify course transferability with a CCCCD academic advisor and/or the college or university that they plan to attend.

ANTHROPOLOGY

60 credit hours

Program Coordinator:

David Marble . . . . . .SCC-B116 . . . . . .972.516.5051

Academic Advisor:

Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

The Anthropology program is designed to provide students with essential life skills and help them better understand themselves and the world around them. Anthropology asks, "What does it mean to be human?" "What different ways are there of being human?", and "How are we to understand these commonalities and differences?" These are critical questions for a world torn by racial and ethnic conflicts and divided by bigotry and unequal opportunities for individual growth and societal development. The study of such questions requires the integration of archaeological, biological, and cultural research — the basic components of anthropology. Anthropology majors or minors gain a solid foundation in the discipline that prepares them for transferring into a university program.

Career Opportunities

The majority of students selecting anthropology as their emphasis at CCCCD transfer into a college or university program. Entry-level positions are available in cultural resource management firms upon completion of an associate degree. Anthropology majors at colleges and universities typically seek careers in teaching the social sciences or research and planning in

governmental or corporate settings. An anthropology minor is an excellent choice for students considering careers in business, medicine, law, government, or diplomacy.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

ANTH	2301	Physical Anthropology	3
ANTH	2302	Introduction to Archaeology	3
ANTH	2346	General Anthropology	3
ANTH	2351	Cultural Anthropology	3
ANTH	2389	Academic Co-op Anthropology	3
BIOL	2404	Human Anatomy and Physiology Basics	4
BIOL	2416	Genetics	4
GEOG	1302	Cultural Geography	3
SOCI	1301	Introduction to Sociology	3
SOCI	2319	Minority Studies	3

ART

60 credit hours

Also see Photography

Program Co-Coordinators:

Art Appreciation/Art History
Betty Siber . . . . . .SCC-A248 . . . . . .972.881.5158
Studio Art
Carter Scaggs . . . . . .SCC-A244 . . . . . .972.881.5867

Academic Advisor:

Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

The Visual Arts program offers courses in foundation classes such as drawing, design, and art appreciation and specialization classes such as painting, watercolor, ceramics, sculpture, printmaking, computer arts, and art history. All labs include professional quality equipment such as an intaglio printing press, a variety of ceramic kilns, electric pottery wheels, and a metal-casting foundry. Gallery spaces serve to acquaint students with current professional artists and to showcase student work in competitions and all-student shows. Seminars in professional practices help prepare the students to function as visual artists. Instructors are highly trained, practicing artists who are dedicated to encouraging the individual student to reach his or her highest level of skill and creativity.

Career Opportunities

Careers in visual arts are varied. Most visible are the practicing, professional visual artists and art teachers. Other career opportunities include work in museums as docents; museum curators; art historians; art restorers; exhibition designers; sales positions in galleries; artists' representatives; art brokers; art therapists; medical illustrators; art administrators and directors of cultural arts programs; color, space or texture consultants; commercial artists; illustration and design of books and advertising; window display; interior design; and fabric, wall, and floor covering design. Students may enroll in Academic Co-op through Cooperative Work Experience to obtain practical experience in the career field.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

ARTS	1301	Art Appreciation	3
ARTS	1303	Art History I	3
ARTS	1304	Art History II	3
ARTS	1311	Design I	3
ARTS	1312	Design II	3
ARTS	1316	Drawing I	3
ARTS	1317	Drawing II	3
ARTS	2311	Introduction to Color/Painting	3
ARTS	2316	Painting I	3
ARTS	2317	Painting II	3
ARTS	2323	Life Drawing I	3
ARTS	2324	Life Drawing II	3
ARTS	2326	Sculpture I	3
ARTS	2327	Sculpture II	3
ARTS	2333	Printmaking I	3
ARTS	2334	Printmaking II	3
ARTS	2346	Ceramics I	3
ARTS	2347	Ceramics II	3
ARTS	2366	Watercolor I	3
ARTS	2367	Watercolor II	3
ARTS	2371	Portfolio	3
ARTS	2389	Academic Co-op Arts/Photography	3

BUSINESS

60 credit hours

Program Coordinators:

Accounting Emphasis
Paula Miller . . . . . .SCC-J219 . . . . . .972.881.5179
Business Emphasis
Peter Dawson . . . . . .SCC-K227 . . . . . .972.881.5031
Economics Emphasis
Tom Hudgins . . . . . .SCC-G225 . . . . . .972.516.5060

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

NOTE: The second digit in a course number indicates the number of credit hours for that course.

The Business Field of Study will lead to a Bachelor of Business Administration (BBA) degree, including all specializations and concentrations offered at a college or university. The Field of Study curriculum will also apply to colleges/universities that award the Bachelor of Arts (BA) or Bachelor of Science (BS) degree with a major in business, including all business specializations. The completed Field of Study will transfer to any Texas public college or university.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement **3 credit hours**
See Page 45.

Within the Field of Study there are courses listed which will satisfy requirements for both the AA Core Curriculum and the Field of Study.

Field of Study **12 credit hours**

ACCT	2301	Financial Accounting	3
ACCT	2302	Managerial Accounting	3
BCIS	1305	Business Computer Applications	3
ECON	2301	Principles of Macroeconomics	3
ECON	2302	Principles of Microeconomics	3
MATH	1325	Calculus for Business and Economics I[1]	3
SPCH	1311	Fundamentals of Speech Communication (with appropriate content only)	3
		OR	
SPCH	1315	Public Speaking I	3
		OR	
SPCH	1321	Business and Professional Speaking (preferred)	3

Recommended Electives

The following recommended electives may also be taken toward a bachelor's degree; however, they are not part of the Field of Study:

BUSI	1301	Introduction to Business[2]	3
BUSI	2301	Business Law[2]	3
MATH	1342	Statistics[2]	3

[1] CCCCD Prerequisite: MATH 1324 within the last three years. *Individual colleges and universities will determine their own prerequisite requirements.*

[2] Please check with the receiving college or university for transfer requirements.

CRIMINAL JUSTICE

60 credit hours

Program Coordinator:
David Marble . . . . . .SCC-B116 . . . . . .972.516.5051

Academic Advisor:
Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

The Associate of Arts degree with an emphasis in Criminal Justice provides general academic courses and electives which enable students who intend to major in criminal justice to transfer to a college or university which offers baccalaureate degrees in Criminal Justice. Students planning to transfer will have a solid foundation upon which to build as they pursue further studies in criminal justice.

The Field of Study curriculum for Criminal Justice includes 15 credit hours of lower-division course work, which will transfer and apply to baccalaureate criminal justice programs at all public universities in Texas. Universities offering equivalent courses at the upper-division level will substitute the lower-division level courses for the upper-division ones, unless they can demonstrate substantial and significant difference in the content of the upper-division courses.

The Field of Study includes the five specified courses listed below. In addition, students may add six credit hours of course work from the "Recommended Electives" to the Field of Study. Students may also add an additional six credit hours of course work from the "Recommended Electives" which may be transferred by local agreement to the university or which may be required by the receiving university, as long as the additional course work does not duplicate content already covered in the other Field of Study courses.

Career Opportunities

Criminal justice graduates are academically prepared for entry-level positions in law-enforcement, court services, and corrections at the local, state, and federal levels of government. Through classroom and laboratory experiences, students acquire the fundamental knowledge and skills necessary to understand the criminal justice system, its agencies, personnel, and functions. Challenging career opportunities await graduates at al levels of government as:

- Corrections Officers
- Law Enforcement Officers and Investigators
- Probation Officers and Parole Officers
- Victim Services Counselors
- Youth Service and Juvenile Court Officers

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Field of Study **15 credit hours**

CRIJ 1301 Introduction to Criminal Justice 3
CRIJ 1306 Court Systems and Practices 3
CRIJ 1310 Fundamentals of Criminal Law 3
CRIJ 2313 Correctional Systems and Practices 3
CRIJ 2328 Police Systems and Practices 3

Recommended Electives **12 credit hours**

CRIJ 1307 Crime in America 3
CRIJ 1313 Juvenile Justice System 3
CRIJ 2301 Community Resources in Corrections 3
CRIJ 2314 Criminal Investigation 3
CRIJ 2323 Legal Aspects of Law Enforcement 3

DANCE

60 Credit Hours

Program Coordinator:

Tiffanee Arnold . . . . . .SCC-B118 . . . . . .972.881.5830

Academic Advisor:

Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

CCCCD's dance program has a strong reputation for excellence in dance education, choreography and performance, propelling students into several prestigious university dance programs. The dance curriculum includes multiple levels of: ballet, modern dance, jazz dance, dance appreciation, improvisation, choreography and performance classes.

The dance program provides a solid foundation of classes that focus on movement fundamentals, technique, performance and choreography. The curriculum provides a comprehensive approach to learning dance by integrating the aesthetics, historical, critical, cultural and fundamental aspects of dance as an art form.

Students interested in additional dance experience may audition for CCCCD's resident dance company. The mission of the company is to produce contemporary dance works at the highest level of artistic excellence. The dance company attends and performs at the American College Dance Festival annually and has received the Gala Award at that festival in 1998, 2000 and 2001. Dance auditions for the dance company are held prior to the fall semester.

For more information about the dance program, contact Tiffanee Arnold, Dance Program Coordinator, at SCC-B118, 972.881.5830 or tarnold@ccccd.edu.

Career Opportunities:

Dance students may select a career in a wide variety of areas. Students should bear in mind that most of these career areas require education beyond the Associate of Arts degree. Careers available to dance students include:

- Choreographer
- Dance Critic
- Dance Educator
- Dance Historian
- Dance/Movement Therapist
- Dance Notator/Labanotation
- Dance Studio Owner/Artistic Director
- Performer

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours

See page 45.

Recommended Electives **12 credit hours**

DANC 1101 Improvisation 1
DANC 1110 Tap Technique I 1
DANC 1111 Tap Technique II 1
DANC 1141 Ballet Technique I 1
DANC 1142 Ballet Technique II 1
DANC 1145 Modern Dance Technique I 1
DANC 1146 Modern Dance Technique II 1
DANC 1147 Jazz Dance Technique I 1
DANC 1148 Jazz Dance Technique II 1
DANC 1151 Dance Performance I 1
DANC 1152 Dance Performance II 1
DANC 1201 Dance Composition 2
DANC 1212 Dance Practicum I 2
DANC 1213 Dance Practicum II 2
DANC 2141 Ballet Technique III 1
DANC 2142 Ballet Technique IV 1
DANC 2145 Modern Dance Technique III 1
DANC 2146 Modern Dance Technique IV 1
DANC 2147 Jazz Dance Technique III 1
DANC 2148 Jazz Dance Technique IV 1
DANC 2151 Dance Performance III 1
DANC 2152 Dance Performance IV 1
DANC 2212 Dance Practicum III 2
DANC 2213 Dance Practicum IV 2
DANC 2303 Dance Appreciation 3
DANC 2389 Academic Co-Op Dance 3

ECONOMICS

See Business on page 50.

EDUCATION

60 credit hours

Program Coordinator:

Elaine Boski-Wilkinson . . .SCC-B132 . . . . . .972.881.5967

Academic Advisor:

Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Collin County Community College offers courses that fulfill the state requirements for Teacher Education. Students must contact the teacher education program at the specific college or university to which they plan to transfer for detailed information. Contact names and phone numbers are available from a CCCCD academic advisor.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

The following courses must be completed under core component requirements:

Mathematics – MATH 1314
Humanities – 3 credit hours of sophomore literature
Communication – SPCH 1321
Natural/Lab Science

EARLY CHILDHOOD EDUCATION – GRADE 4 CERTIFICATION

The Early Childhood Education-Grade 4 Certification Field of Study will lead to the Bachelor of Science in Human Sciences or Bachelor of Science in Interdisciplinary Studies with a Concentration in Child and Family Studies/Child Development – including Certification in Early Childhood Education. The completed Field of Study will transfer to any Texas public college or university.

Field of Study		**15 credit hours**
TECA 1303	Family and the Community	3
TECA 1311	Introduction to Early Childhood Education	3
TECA 1318	Nutrition, Health, and Safety	3
TECA 1354	Child Growth and Development	3
Choose one course from the following[1]:		
CDEC 1321	The Infant and Toddler	3
CDEC 1319	Child Guidance	3
CDEC 1358	Creative Arts for Early Childhood	3
CDEC 1359	Children with Special Needs	3
CDEC 2341	The School Age Child	3

[1] Check with the receiving college or university for transfer requirements.

GRADES 4 – 8 CERTIFICATION

The Grade 4-8 Certification Field of Study will lead to a Bachelor of Science degree in English, Language Arts and Reading; Social Studies; English, Language Arts and Reading/Social Studies Composite; Mathematics; Science; Mathematics/Science Composite; or Interdisciplinary Studies (Generalist or Bilingual Generalist). The completed Field of Study will transfer to any Texas public college or university.

Field of Study		**15 credit hours**
EDUC 1301	Introduction to Education	3
MATH 1350	Fundamentals of Math I	3
MATH 1351	Fundamentals of Math II	3
TECA 1354	Child Growth and Development	3
Choose one course from the following[1]:		
CDEC 1359	Children with Special Needs	3
EDUC 2301	Introduction to Special Education	3
GEOG 1301	Physical Geography[1]	3
GEOG 1302	Cultural Geography[1]	3
PHYS 1415	Physical Science I	4
SPAN 1411	Beginning Spanish I	4
SPAN 2311	Intermediate Spanish I1	3

[1] Check with the receiving college or university for transfer requirements.

SECONDARY EDUCATION

Secondary education students must complete a bachelor's degree with teacher certification in an approved teaching field. Students should visit with a CCCCD academic advisor or the college or university to which they plan to transfer to ensure that they take the correct courses for their secondary education program.

TEACHER CERTIFICATION PROGRAM

The Teacher Certification Program is located within the Center for Teaching, Learning, and Professional Development at CCCCD@ALLEN (inside Allen High School). For details, see page 43 or contact the program coordinator.

Program Coordinator:
Sabrina Belt . . . . . .AHS-Q101 . . . . . .214.491.6206
Academic Advisor:
Jyo Pai . . . . . .AHS-Q101 . . . . . .214.491.6202

ENGLISH

60 credit hours

Program Coordinator:
Shirley McBride . . . . . .SCC-B193 . . . . . .972.881.5675
Academic Advisor:
Tori Hoffman . . . . . .PRC F142 . . . . . .972.377.1779

An emphasis in English promotes the development of writing skills, reasoning, and critical thinking. Composition and rhetoric courses focus on expository and persuasive writing including argumentation, logical thinking, and research. An integral part of each course is a lab component that is designed to help students identify weak areas in their writing, eliminate individual writing problems, and strengthen writing skills.

The Writing Center, another part of the English program, provides professional consultation to students across the curriculum. At the center, students can get immediate help in composing, writing, and revising papers, resumes, reports, etc.

Some Composition/Rhetoric I courses are taught in computer classrooms. The department also offers distance learning classes. Students may also enroll in Cooperative Work Experience to gain practical work experience.

Career Opportunities

- Positions requiring writing skills
- Positions requiring editing/proofing skills
- Positions requiring critical thinking skills
- Positions requiring knowledge of the research process Combined with further study, the associate degree with an emphasis in English may equip students for a variety of careers in education, law, government, and public information.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

ENGL	2307	Creative Writing	3
ENGL	2311	Technical Writing	3
ENGL	2322	British Literature I	3
ENGL	2323	British Literature II	3
ENGL	2327	American Literature I	3
ENGL	2328	American Literature II	3
ENGL	2332	World Literature I	3
ENGL	2333	World Literature II	3
ENGL	2342	Introduction to Literature I – Short Story and Novel	3
ENGL	2343	Introduction to Literature II – Poetry and Drama	3
XXXX	x4xx	Foreign Language Sequence I	4
XXXX	x4xx	Foreign Language Sequence II	4

FRENCH

60 credit hours

Program Coordinator:
Shirley McBride . . . . . .SCC-B193 . . . . . .972.881.5675
Academic Advisor:
Tori Hoffman . . . . . .PRC F142 . . . . . .972.377.1779

An emphasis in French provides the essential language background for the advanced study of French, for competency in understanding, speaking, and writing the language, and for a more rapid acquisition of other foreign languages (particularly romance languages such as Spanish). The courses are oral-proficiency based in order to enable the student to converse in French as quickly as possible.

Career Opportunities

When combined with further study beyond the associate degree, an emphasis in French may lead to careers in education, business, or government. In light of the opportunities presented by the emergence of a common European market, the mastery of French and other European languages may lead to exciting career opportunities when combined with a business or marketing degree.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

FREN	1100	French Conversational I[1]	1
FREN	1110	French Conversational II[2]	1
FREN	1411	Beginning French I	4
FREN	1412	Beginning French II	4
FREN	2303	French Literature I	3
FREN	2304	French Literature II	3
FREN	2311	Intermediate French I[1]	3
FREN	2312	Intermediate French II[2]	3

[1] Corequisites: must be taken simultaneously.
[2] Corequisites: must be taken simultaneously.

GEOGRAPHY

60 credit hours

Program Coordinator:
Debbie White . . . . . .SCC-H221 . . . . . .972.881.5163
Academic Advisor:
Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

Because our world is immersed in the Information Age and we have entered a period in human history marked by increasing globalization, it is important for students to be geographically literate. The geography program is designed to expand students' knowledge about the physical and cultural environments of the world and prepare them for a career in the global market.

Career Opportunities

Students transferring into a college or university geography curriculum can prepare for diverse careers in urban planning, petroleum exploration, cartography (mapping), and corporate planning for expansion and development. Many universities require education majors to take a geography course as part of their degree.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

GEOG 1301	Physical Geography	3
GEOG 1302	Cultural Geography	3
GEOG 1303	World Regional Geography	3
ANTH 2351	Cultural Anthropology	3
HIST 2311	Western Civilization I	3
HIST 2312	Western Civilization II	3
PSYC 2301	General Psychology	3
XXXX x4xx	Foreign Language Sequence I	4
XXXX x4xx	Foreign Language Sequence II	4

GERMAN

60 credit hours

Program Coordinator:

Shirley McBride .....SCC-B193 .....972.881.5675

Academic Advisor:

Tori Hoffman .....PRC F142 .....972.377.1779

An emphasis in German provides the essential language background for the advanced study of German, for competency in understanding, speaking, and writing the language, and for a more rapid acquisition of other foreign languages (particularly Germanic languages such as Dutch). The courses are oral-proficiency based in order to enable students to converse in German as quickly as possible.

Career Opportunities

The reunification of Germany has created many job opportunities in international relations, business, and finance. German has emerged as an important language in both the European community and the world market. Combining the study of German with business or related degrees provides students with the tools to live and work in an international environment.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

GERM 1100	Conversational German I[1]	1
GERM 1110	Conversational German II[2]	1
GERM 1411	Beginning German I	4
GERM 1412	Beginning German II	4
GERM 2311	Intermediate German I[1]	3
GERM 2312	Intermediate German II[2]	3

[1] Corequisites: must be taken simultaneously.
[2] Corequisites: must be taken simultaneously.

GOVERNMENT

60 credit hours

Program Coordinators:

Lynn Jones .....SCC-B134 .....972.881.5841
Debra St. John .....PRC-U147 .....972.377.1617

Academic Advisor:

Carie Andrews .....SCC-G106 .....972.881.5773

An Associate of Arts degree with an emphasis in Government is a stepping-stone to a liberal arts education. The second step is a bachelor's degree from a college or university. The Government program features introductory courses in political science, American, and Texas politics. The courses emphasize contemporary political analysis, critical thinking, and hands-on experiential learning exercises.

Career Opportunities

A major in government provides an excellent background for law school, a career in education, or a broad background in the liberal arts which is valued by employers in all areas.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

GOVT 2304	Introduction to Political Science	3
CRIJ 1301	Introduction to Criminal Justice	3
ECON 2301	Principles of Macroeconomics	3
ECON 2302	Principles of Microeconomics	3
PHIL 2303	Introduction to Logic	3
PHIL 2306	Introduction to Ethics	3
PSYC 2301	General Psychology	3
XXXX x4xx	Foreign Language Sequence I	4
XXXX x4xx	Foreign Language Sequence II	4

HISTORY

60 credit hours

Program Coordinators:

Wendy Gunderson .....PRC-F213 .....972.377.1536
David Cullen .....SCC-J244 .....972.881.5965

Academic Advisor:

Carie Andrews .....SCC-G106 .....972.881.5773

The History program is designed for students interested in completing an associate degree as well as students pursuing a

NOTE: The second digit in a course number indicates the number of credit hours for that course.

bachelor's degree. The American survey history courses meet the state's requirement for six hours of American history. In addition to the survey courses, the program also includes classes in Western Civilization, History of Texas, History of Women in America, Survey of the History of American Religion, and Introduction to American and the World in the Twentieth Century.

Career Opportunities

Background acquired by students majoring in history prepares them for careers in a variety of fields such as journalism, law, politics, social work, television, radio, etc. A degree in history is not only beneficial to students seeking a career as a writer or teacher, but also will provide career opportunities in such adjacent fields as public history, museum curator, archivist, research associate for public and private agencies, and in developing fields like environmental historian for state agencies, contract work for legal firms and in the areas of computer/video/film documentaries.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

HIST	2301	History of Texas	3
HIST	2311	Western Civilization I	3
HIST	2312	Western Civilization II	3
ECON	2301	Principles of Macroeconomics	3
ECON	2302	Principles of Microeconomics	3
PHIL	1301	Introduction to Philosophy	3
PHIL	2303	Introduction to Logic	3
PSYC	2301	General Psychology	3
SOCI	1301	Introduction to Sociology	3
XXXX	x4xx	Foreign Language Sequence I	4
XXXX	x4xx	Foreign Language Sequence II	4

MUSIC

66 credit hours
Also see AAS – Music

Program Coordinator:
Brian Allison . . . . . .SCC-B182 . . . . . .972.881.5813
Academic Advisor:
Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

The Associate of Arts degree with an emphasis in Music provides the approved field of study for all music majors intending to transfer upon degree completion to a college or university. The curriculum offers the required music theory, ear training, keyboard skills, music literature, private applied study, and ensemble participation that all music majors must complete during their freshman and sophomore years.

Students should consult with the college or university that they plan attending before taking additional courses beyond those outlined in the Associate of Arts emphasis in music.

Career Opportunities

- Music Education
- Performer
- Composer

Music Core Curriculum **31 credit hours**

ENGL	1301	Composition/Rhetoric I	3
ENGL	1302	Composition/Rhetoric II	3
GOVT	2301	American Government I	3
GOVT	2302	American Government II	3
HIST	1301	U. S. History I	3
HIST	1302	U. S. History II	3
MATH	1314	College Algebra[1]	3
Natural Science[3]			
PSYC	2301	General Psychology[2]	3
SPCH	1311	Fundamentals of Speech Communication[4]	3

Field of Study Courses **35 credit hours**

MUSI	1311	Music Theory I	3
MUSI	1116	Aural Skills I	1
MUAP	12xx	Principal Applied Music (one each semester)	8
MUEN	x1xx	Ensemble (one each semester)	4
MUSI	1181	Beginning Piano I[5]	1
MUSI	1312	Music Theory II	3
MUSI	1117	Aural Skills II	1
MUSI	1182	Beginning Piano II[5]	1
MUSI	2311	Music Theory III	3
MUSI	2116	Aural Skills III	1
MUSI	2181	Beginning Piano III[5]	1
MUSI	1307	Introduction to Music Literature	3
MUSI	2312	Music Theory IV	3
MUSI	2117	Aural Skills IV	1
MUSI	2182	Beginning Piano IV[5]	1

[1] A higher level mathematics course may be substituted.
[2] May substitute SOCI 1301.
[3] Select from approved courses on page 45.
[4] May substitute SPCH 1315
[5] All music majors must see the program coordinator. Students exempted from Beginning Piano classes must substitute up to four (4) credit hours from the following: MUAP 11xx, MUSI 1183, MUSI 1184, MUSI 1192, MUSI 1193, MUSI 2192, or MUSI 2193.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

PARALEGAL/LEGAL ASSISTANT

60 credit hours

Also see Associate of Applied Science Paralegal/Legal Assistant

Program Coordinator:

Peter Dawson . . . . . .SCC-K227 . . . . . .972.516.5031

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

The Texas Woman's University (TWU) and CCCCD Paralegal programs entered an articulation agreement, effective fall 1999, that establishes a plan for students to obtain an Associate of Arts degree from CCCCD and a Bachelor of Science degree in Paralegal Studies from TWU. Students pursuing this plan will be assured transfer of all CCCCD legal courses toward the BS at TWU.

Career Opportunities

Employment opportunities for entry-level paralegals/legal assistants include the following:

- Law firms
- Corporations
- Governmental agencies

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement **3 credit hours**
See page 45.

Recommended Electives **12 credit hours***

LGLA	1303	Legal Research	3
LGLA	1307	Introduction to Law and the Legal Profession	3
LGLA	1346	Civil Litigation I	3
LGLA	2307	Law Office Management	3

* LGLA 1303, LGLA 1307, LGLA 1346, and LGLA 2307 are required under the TWU/CCCCD articulation agreement. Additional hours may be required for transfer. Contact the program coordinator.

PHILOSOPHY

60 credit hours

Program Coordinator:

Joanne Stevens . . . . . .SCC-J218 . . . . . .972.881.5129

Academic Advisor:

Tori Hoffman . . . . . .PRC F142 . . . . . .972.377.1779

The Philosophy program seeks to develop men and women dedicated to the pursuit of knowledge. Students become acquainted with the main problems of philosophy. Emphasis is placed on philosophical thinking that enables graduates to integrate their work and their lives.

Career Opportunities

- Preparation for those who plan to major in philosophy at a college or university
- Preparation for related fields such as law, government, education, business, science, and the humanities

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement **3 credit hours**
See page 45.

Recommended Electives **12 credit hours**

PHIL	1301	Introduction to Philosophy	3
PHIL	1304	Comparative Religion	3
PHIL	2303	Introduction to Logic	3
PHIL	2306	Introduction to Ethics	3
PHIL	2307	Introduction to Social and Political Philosophy	3
PHIL	2371	Philosophy of Art/Aesthetics	3
ENGL	2322	British Literature I	3
ENGL	2323	British Literature II	3
ENGL	2332	World Literature I	3
ENGL	2333	World Literature II	3
GOVT	2304	Introduction to Political Science	3
HIST	2311	Western Civilization I	3
HIST	2312	Western Civilization II	3
XXXX	x4xx	Foreign Language Sequence I	4
XXXX	x4xx	Foreign Language Sequence II	4

PHOTOGRAPHY

60 credit hours

Program Coordinators:

June Van Cleef (fall) . . . . .SCC-H206 . . . . . .972.881.5827
Gary Bishop (spring) . . . . .SCC-K119 . . . . . .972.881.5159

Academic Advisor:

Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

For commercial photography, instructional emphasis is offered in product illustration, news/editorial photography, color processing and printing, the portrait, large format photography, and digital photography.

For fine arts photography, courses are offered in landscape, portrayal, large format cameras and the zone system, non-silver processes, and portfolio.

Career Opportunities

Jobs in photography vary and can be applied to related disciplines:

- Architectural Photographer
- Commercial Illustration
- Digital Image Manipulation

NOTE: The second digit in a course number indicates the number of credit hours for that course.

- Freelance Work
- Historical Documentary Photographer
- Industrial Photography
- Multimedia Presentation
- News/Editorial
- Photo Lab Technician
- Portrait Studio
- Product Catalog Illustration
- Teaching

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

ARTS	2356	Photography I	3
ARTS	2357	Photography II	3
ARTS	2371	Portfolio[1]	3
ARTS	2389	Academic Co-op Arts/Photography	3
COMM	1316	Photo Illustration	3
COMM	1317	Applied Photography	3
DRAM	2366	History of Film Making I	3

PSYCHOLOGY

60 credit hours

Program Coordinators:

Dan Lipscomb . . . . . .SCC-H252 . . . . . .972.881.5715
Barbara Lusk . . . . . .CPC-B252B 972.548.6809

Academic Advisor:

Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

An Associate of Arts degree with an emphasis in Psychology serves as a foundation for continued studies in psychology. Since most careers in psychology require an advanced degree, many students transfer to a college or university and eventually enter graduate school in psychology. The Psychology program features a variety of introductory courses exploring the nature of behavior and mental processes. Course offerings include general psychology, applied psychology, and life-span psychology. These courses emphasize current psychological theory and research, as well as the practical application of the basic principles of psychology to the student's daily life. Many courses in the program require participation in hands-on, experiential laboratory exercises that further emphasize practical application of course material.

Career Opportunities

Students who earn advanced degrees in psychology are often employed as counselors, psychotherapists, and mental health workers. With further study, a psychology degree may also be used as a stepping-stone to a career in education, business, law, or medicine.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

PSYC	2301	General Psychology	3
PSYC	2306	Human Sexuality	3
PSYC	2314	Life Span Psychology	3
PSYC	2315	Psychology of Adjustment	3
PSYC	2316	Psychology of Personality	3
PSYC	2319	Social Psychology	3
SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3
SOCI	2301	Marriage and Family	3

SOCIOLOGY

60 credit hours

Program Coordinator:

Debbie White . . . . . .SCC-H221 . . . . . .972.881.5163

Academic Advisor:

Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

The Sociology program at CCCCD is designed to provide students with essential life skills and a deeper understanding of themselves, others, and the various social worlds that they inhabit. Sociology examines how social factors affect both behavior and the potential consequences of that behavior. It seeks to uncover the existence of social patterns, explain how they come to be so, and then explore the consequences of such patterns for different individuals, groups, collectives, and society at large. As such, sociology courses at CCCCD enable students to comprehend the widespread social changes that accompany society's immersion into the Information Age.

Critical thinking skills and a global perspective–attributes that will benefit students regardless of their major–are strongly emphasized in the program. Students who either major or minor in sociology will gain a solid foundation in the discipline and will be well prepared to transfer into a university program.

Career Opportunities

Sociology majors typically seek careers in teaching, social services, or research and planning in governmental or corporate settings.

Sociology is also an excellent minor for students considering careers in education, business, law, social work, medicine, or

NOTE: The second digit in a course number indicates the number of credit hours for that course.

psychology. The knowledge gained from sociology courses enhances a student's chances of being successful in accomplishing their career and life goals.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

SOCI	1301	Introduction to Sociology	3
SOCI	1306	Social Problems	3
SOCI	2301	Marriage and Family	3
SOCI	2306	Human Sexuality	3
SOCI	2319	Minority Studies	3
ANTH	2351	Cultural Anthropology	3
PSYC	2301	General Psychology	3
PSYC	2314	Life Span Psychology	3
PSYC	2316	Psychology of Personality	3
PSYC	2319	Social Psychology	3

SPANISH

60 credit hours

Program Coordinators:
Shirley McBride . . . . . .SCC-B193 . . . . . .972.881.5675

Academic Advisor:
Tori Hoffman . . . . . .PRC F142 . . . . . .972.377.1779

The Associate of Arts degree with an emphasis in Spanish provides the essential language background for the advanced study of Spanish, for the mastery of the competencies in listening, speaking, and writing the language, and for a more rapid acquisition of other foreign languages (such as romance languages like French.) The courses are oral-proficiency based in order to enable the student to converse in Spanish as quickly as possible.

Career Opportunities

The demand for Spanish both in the community and the business environment is growing rapidly. Combining Spanish with another field can expand opportunities in nursing, teaching, computer science, sociology, banking, counseling, law, and many other areas.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

SPAN	1300	Conversational Spanish I	3
SPAN	1310	Conversational Spanish II	3
SPAN	1411	Beginning Spanish I	4
SPAN	1412	Beginning Spanish II	4
SPAN	2311	Intermediate Spanish I	3
SPAN	2312	Intermediate Spanish II	3
SPAN	2321	Spanish Literature I	3
SPAN	2322	Spanish Literature II	3

SPEECH COMMUNICATION

60 credit hours

Program Coordinator:
Sherry Rhodes . . . . . .SCC-I206 . . . . . .972.516.5063

Academic Advisor:
Tori Hoffman . . . . . .PRC F142 . . . . . .972.377.1779

The Associate of Arts degree with an emphasis in Speech Communication gives students a broad background in communication competencies. Speech communication courses improve interpersonal communication skills and teach presentation techniques. Students taking courses in Speech Communication gain enhanced awareness of the impact communication skills have both in the personal and professional arenas. Both the traditional rhetorical approach (oral presentation) and the behavioristic approach (communication theory and skill) are reflected in speech communication course offerings.

Students who desire practical experience in their career fields may enroll in an academic co-op course through Cooperative Work Experience.

Career Opportunities

The Associate of Arts degree with an emphasis in Speech Communication provides students with a solid foundation for careers that involve a high degree of interaction with the public. Occupations involving marketing research, conference and special events planning, product/service demonstrations, and sales are possible careers. The emphasis also offers the academic foundation to successfully complete a bachelor's degree at a college or university, and then to pursue a career in fields such as mass media, public relations, law, government, personnel, employee relations, and education.

AA Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

SPCH	1311	Fundamentals of Speech Communication	3
SPCH	1315	Public Speaking I	3
SPCH	1321	Business and Professional Speaking	3
COMM	1307	Introduction to Mass Communication	3
COMM	2331	Radio and TV Announcing	3
COMM	2332	Radio/Television News	3

NOTE: The second digit in a course number indicates the number of credit hours for that course.

THEATRE

60 credit hours

Program Coordinator:

Brad Baker . . . . . .SCC-C155 . . . . . .972.881.5679

Academic Advisor:

Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

The Theatre program at CCCCD was the 1996 national champion of collegiate drama, as determined by the Kennedy Center/American College Theatre Festival, and has been ranked among the top 50 collegiate drama programs nationally during each of the past five years and was ranked in the top five in 2001.

The Quad C Theatre program strives to introduce students to the aesthetic and analytical elements of theatrical productions. It offers studies in the principles and practices of acting, stagecraft, basic costuming preparation, theatre marketing, technical theatre production, and stage management. The labs permit students to have hands-on experiences through performances, as well as shop and crew duties. Studies include contemporary theories and classical aspects of theatrical productions.

CCCCD's Theatre program offers a full curriculum of theatre study including work in beginning and advanced acting, voice and diction, scenic, sound, and lighting design, costume design and stage makeup, theatre history and dramatic literature, and specialty courses in circus skills, stunt work, stage combat, directing, musical theatre, and acting for the camera. Theatre program faculty and students have experience in professional stage and motion picture work.

For more information about the Quad C Theatre program, contact Brad Baker, Director of Theatre, at SCC-C155, 972.881.5679, or via e-mail at bbaker@ccccd.edu.

- Career Opportunities
- Costume Technician
- Lighting Technician
- Performer
- Producer/Director
- Scenic Artist
- Sound Technician
- Technical Director/Stage Manager
- Theatre Education
- Theatre Marketing and Management

AA Core Curriculum **45 credit hours**

Additional Graduation Requirement **3 credit hours**

See page 45.

Recommended Electives **12 credit hours**

BMGT 1391	Business of Theatre	3
DRAM 1120	Theatre Practicum - Performance	1
DRAM 1121	Theatre Practicum - Technical	1
DRAM 1161	Musical Theatre Workshop I	1
DRAM 1162	Musical Theatre Workshop II	1
DRAM 1310	Introduction to the Theatre	3
DRAM 1322	Stage Movement	3
DRAM 1323	Basic Theatre Practice	3
DRAM 1330	Stagecraft I	3
DRAM 1341	Theatrical Makeup	3
DRAM 1342	Introduction to Costuming	3
DRAM 1351	Acting I	3
DRAM 1352	Acting II	3
DRAM 1370	Stage Management	3
DRAM 1373	Sound Design for Theatre	3
DRAM 2120	Demonstration Lab	1
DRAM 2331	Stagecraft II	3
DRAM 2336	Voice and Diction	3
DRAM 2351	Acting III: Improvisation	3
DRAM 2352	Acting IV: Acting for Film and TV	3
DRAM 2361	History of Theatre I	3
DRAM 2362	History of Theatre II	3
DRAM 2363	History of Musical Theatre	3
DRAM 2366	History of Film Making I	3
DRAM 2367	History of Film Making II	3
DRAM 2370	Theatre Outreach	3
DRAM 2372	Survey of Contemporary American Dramatic Literature	3
DRAM 2373	Costume Design II	3
DRAM 2374	Intermediate Makeup	3
DRAM 2375	Lighting Design	3
DRAM 2376	Stage Combat and Circus Skills	3
DRAM 2377	Shakespeare: Shakespeare on Stage	3
DRAM 2378	Shakespeare: World and Words	3

AREAS OF EMPHASIS FOR THE ASSOCIATE OF SCIENCE DEGREE

The Associate of Science degree provides general academic courses and electives for students who plan to transfer to a college or university. Because of the various transfer requirements at colleges and universities, and to ensure enrollment in appropriate courses, students should verify course transferability with a CCCCD academic advisor and/or the college or university that they plan to attend.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

BIOLOGY

60 credit hours

Program Coordinators:

David McCulloch .....SCC-J220 .....972.881.5991
Donna White .....SCC-J224 .....972.881.5889

Academic Advisor:

Windy Pitcock .....SCC-G104 .....972.881.5854

The Associate of Science degree with an emphasis in Biology emphasis provides an educational foundation to prepare students to pursue university studies leading to a bachelor's degree in a science-related field. Today, more than ever, an understanding of biology is critical to human life and the future of the planet. Fast-paced developments in medicine, genetics, and environmental issues can be bewildering without basic knowledge of biological science. An excellent instructional staff, computer-aided instruction, state-of-the-art laboratory facilities, and an emphasis on current research give biology students at CCCCD a personalized, high quality educational experience.

Career Opportunities

Many career opportunities are available in the biological sciences. In particular, the areas of health care, genetic research, and environmental science are predicted to provide many job opportunities in the coming decade. The career areas listed below require training beyond the Associate of Science degree and some will require a graduate degree.

- Agriculture
- Allied Health Sciences
- Biotechnology
- Botany
- Dentistry
- Ecology
- Environmental Science
- Genetic Counseling
- Genetic Engineering
- Marine Science
- Medical Research
- Medical Technology
- Medicine
- Microbiology
- Nutrition and Dietary Science
- Pharmacology
- Physical Therapy
- Science Education
- Toxicology
- Veterinary Science
- Wildlife Biology

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

BIOL	1322	General Nutrition	3
BIOL	1411	General Botany	4
BIOL	1470	Marine Biology	4
BIOL	1472	Field Biology	4
BIOL	2389	Academic Co-op Biology	3
BIOL	2401	Anatomy and Physiology I	4
BIOL	2402	Anatomy and Physiology II	4
BIOL	2406	Environmental Biology	4
BIOL	2416	Genetics	4
BIOL	2420	Microbiology	4
BIOL	2428	Comparative Vertebrate Anatomy	4
BIOL	2470	Human Genetics	4
CHEM	1411	General Chemistry I	4
CHEM	1412	General Chemistry II	4
CHEM	2423	Organic Chemistry I	4
CHEM	2425	Organic Chemistry II	4
ENVR	1470	West Texas Natural History	4
MATH	1342	Statistics	3
PHYS	1401	General Physics I	4
PHYS	1402	General Physics II	4
PHYS	2425	University Physics I	4
PHYS	2426	University Physics II	4
SRGT	1301	Medical Terminology I	3

CHEMISTRY

60 credit hours

Program Coordinator:

Amina El-Ashmawy .....SCC-I104 .....972.881.5961

Academic Advisors:

Windy Pitcock .....SCC-G104 .....972.881.5854

The Associate of Science degree with an emphasis in Chemistry establishes an academic foundation for further studies in the sciences. Courses include general chemistry and organic chemistry, as well as an introduction to chemistry designed for students who are novices in the science disciplines. Solving problems in chemistry requires creativity and curiosity as well as logic and reasoning. An excellent instructional staff, computer-aided instruction, laboratory facilities, and current scientific literature give chemistry students at CCCCD a personalized, high quality educational experience.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Career Opportunities

Modern society offers both challenging and lucrative careers to employees with scientific and technical backgrounds. Careers listed below demand knowledge of chemistry and many require academic training beyond the Associate of Science degree.

- Biomedical Engineer
- Chemical Engineer
- Cosmetics Researcher
- Dietician
- Environmental Scientist
- Geophysicist
- Industrial Researcher
- Medical Technologist
- Nurse
- Oceanographer
- Perfumer
- Pharmacist
- Physician
- Veterinarian

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement **3 credit hours**
See page 45.

Recommended Electives **12 credit hours**

CHEM 2389	Academic Co-op Chemistry	.3
CHEM 2401	Analytical Chemistry	.4
CHEM 2423	Organic Chemistry I	.4
CHEM 2425	Organic Chemistry II	.4
MATH 2320	Differential Equations	.3
MATH 2415	Calculus III	.4
PHYS 2425	University Physics I	.4
PHYS 2426	University Physics II	.4

COMPUTER SCIENCE

60 credit hours

Program Coordinators:

Bill Blitt . . . . . .SCC-J115 . . . . . .972.881.5184

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

The Associate of Science degree with an emphasis in Computer Science prepares students for work in a variety of related areas. In particular, students are prepared for transfer to a college or university where they can specialize in such disciplines as Computer Science and Computer Software Engineering. The coursework for a Bachelor of Science degree in Computer Science is similar at most colleges and universities; however, the student is advised to consult an academic advisor when deciding upon which university to attend and which course of study to pursue.

Career Opportunities

Software engineers and computer scientists currently occupy more than two-thirds of all technical and a large percentage of managerial positions in industry.

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement **3 credit hours**
See page 45.

Recommended Electives **12 credit hours**

COSC 1420	Introduction to Programming – C++[1]	.4
COSC 1437	Object-Oriented Programming – Java	.4
COSC 2315	Object-Oriented Data Structures – C++	.3
COSC 2325	Assembly Language	.3
COSC 2420	Introduction to Object-Oriented Programming – C++[2]	.4
COSC 2436	Object-Oriented Data Structures – Java	.4
MATH 2305	Discrete Mathematics[3]	.3
MATH 2413	Calculus I[3]	.3
MATH 2414	Calculus II[3]	.3

[1] May substitute COSC 1320

[2] May substitute COSC 2320

[3] Recommended course for additional mathematics requirement

Field of Study **30-31 credit hours**

Field of Study curriculum is a set of courses that will satisfy the lower division requirements for a bachelor's degree in a specific academic area at a general academic teaching institution. If a student successfully completes the field of study curriculum, that block of courses may be transferred to a general academic teaching institution and must be substituted for that institution's lower division requirements for the degree program for the field of study into which the student transfers, and the student shall receive full academic credit toward the degree program for the block of courses transferred.

Within the Field of Study there are courses listed which will satisfy requirements for both the AS Core Curriculum and the Field of Study.

COSC 1320 or 1420	Programming/Introduction to Programming Using C++[1, 2, 3]	.3/4
COSC 1437	Object-Oriented Programming – Java[4, 5]	.4
COSC 2436	Object-Oriented Data Structures – Java[6]	.4
COSC 2325	Assembly Language[7]	.3
MATH 2413	Calculus I[8]	.4
MATH 2414	Calculus II[8]	.4
PHYS 2425	University Physics I[8]	.4
PHYS 2426	University Physics II[8]	.4

NOTE: The second digit in a course number indicates the number of credit hours for that course.

[1] COSC 1336/1436 and 1337/1437 are preparatory and sequential in nature; however, not all courses are required for the Computer Science major at all universities, but may apply to general degree requirements.

[2] COSC 1336/1436 is not part of the Computer Science major requirements at The University of Texas at Austin, University of Texas at Arlington, University of Texas at Dallas, and Texas A&M University. Preparatory courses such as COSC 1336/1436 will assist students that need additional background but do not apply toward the computer science major requirements.

[3] CCCCD COSC 1320/1420 are equivalent courses to COSC 1336/1436.

[4] COSC 1337/1437 is not part of the Computer Science major requirements at The University of Texas at Austin. Preparatory courses such as COSC 1336/1436 and COSC 1337/1437 will assist students that need additional background but do not apply toward the computer science major requirements.

[5] CCCCD COSC 2320/2420 are equivalent courses, taught in C++.

[6] CCCCD COSC 2315 is an equivalent course, taught in C++.

[7] COSC 2325/2425 is not part of the Computer Science major requirements at the University of Texas at Austin or Texas A&M University, but may be applied to general degree requirements.

[8] It is recommended that students complete the math sequence, physics sequence, and computer science sequence at the same institution to reduce the likelihood of potential gaps in the curriculum.

ENGINEERING

73 credit hours

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

The Engineering Field of Study is preparation for a Bachelor of Science in several disciplines within the school of engineering at a college or university. The completed Field of Study is designed to transfer to any Texas public college or university.

Career Opportunities

Engineers presently occupy more than two-thirds of all technical and a large percentage of managerial positions in industry. The Engineering program prepares students for transfer to a college or university where they can specialize in such disciplines as:

- Aerospace Engineering
- Agriculture Engineering
- Biochemical and Food Engineering
- Bioengineering
- Chemical Engineering
- Civil Engineering
- Computer Science Engineering
- Electrical Engineering
- Forest Engineering
- Industrial Engineering
- Mechanical Engineering
- Nuclear Engineering
- Ocean Engineering
- Petroleum Engineering
- Radiological Health Engineering

AS Core Curriculum **45 credit hours**

Additional Graduation Requirement **3 credit hours**

See page 45.

Students in this Field of Study need a higher proficiency in computer science and are advised to substitute COSC 1420 for COSC 1300. Within the Field of Study there are courses listed which will satisfy requirements for both the AS Core Curriculum and the Field of Study.

Field Of Study **36 credit hours**

CHEM 1412 General Chemistry II[1] 4
ENGR 2301 Engineering Mechanics I 3
ENGR 2302 Engineering Mechanics II 3
ENGR 2305 Circuits I 3
MATH 2320 Differential Equations 3
MATH 2413 Calculus I[1] 4
MATH 2414 Calculus II 4
MATH 2415 Calculus III 4
PHYS 2425 University Physics I 4
PHYS 2426 University Physics II 4

[1] Please check prerequisites for this course

Recommended Elective

The following recommended elective may also be taken toward a bachelor's degree; however, it is not part of the Field of Study:
ENGR 1201 Introduction to Engineering 2

ENGINEERING TECHNOLOGY

ELECTRONIC AND COMPUTER ENGINEERING TECHNOLOGY

70 Credit Hours

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

The Engineering Technology Field of Study is preparation for a Bachelor of Science degree in Electronics and Computer Engineering Technology at a college or university. The completed Field of Study is designed to transfer to any Texas public college or university.

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Students in this Field of Study need a higher proficiency in computer science and are advised to substitute COSC 1420 for COSC 1300. Within the Field of Study there are courses listed which will satisfy requirements for both the AS Core Curriculum and the Field of Study.

Field Of Study **35 credit hours**

CHEM 1411 General Chemistry I 4
ENGL 2311 Technical Writing 3
ENGT 1401 Circuits I 4
ENGT 1407 Digital Fundamentals 4
ENGT 1402 Circuits II 4
MATH 2413 Calculus I[1] 4
MATH 2414 Calculus II 4
PHYS 2425 University Physics I 4
PHYS 2426 University Physics II 4

[1] Please check prerequisites for this course

Recommended Elective

The following recommended elective may also be taken toward a bachelor's degree; however, it is not part of the Field of Study:
ENGR 1201 Introduction to Engineering

ENVIRONMENTAL SCIENCE

60 credit hours

Program Coordinator:

Daphne Hall-Babcock . . . .SCC-I226 . . . . . .972.578.5518

Academic Advisor:

Windy Pitcock . . . . . .SCC-G104 . . . . . .972.881.5854

Environmental Science is a multidisciplinary field concerned with the interaction of processes that shape our natural environment, more specifically, understanding environmental problems and finding solutions to them. Students pursuing an Associate of Science degree with emphasis in environmental science will find that this field requires the understanding of a number of disciplines, including the biological, chemical, and physical sciences, engineering, law, economics, and environmental health and safety.

Career Opportunities

Environmental Science majors pursue careers in business and industry, government agencies, educational institutions, and private consulting firms in broad or specialized fields such as air pollution, laboratory services, solid and hazardous waste, natural resource management, regulatory affairs, remediation, risk assessment, toxicology, pollution prevention, health and safety, and water and wastewater.

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

ENVR 1401 Environmental Science I 4
ENVR 1402 Environmental Science II 4
ENVR 1470 West Texas Natural History 4
BIOL 1406 General Biology I 4
BIOL 1470 Marine Biology 4
BIOL 2406 Environmental Biology 4
CHEM 1411 General Chemistry I 4
GEOL 1403 Physical Geology 4
GEOL 1405 Earth Habitat 4
GEOL 1445 Oceanography 4
GEOL 1447 Introduction to Meteorology 4
GEOL 2470 Archaeology Science 4
PHYS 1401 General Physics I 4

NOTE: The second digit in a course number indicates the number of credit hours for that course.

GEOLOGY

60 credit hours

Program Coordinator:

Robert Forester . . . . . .SCC-B228 . . . . . .972.881.5712

Academic Advisor:

Windy Pitcock . . . . . .SCC-G104 . . . . . .972.881.5854

The science of geology seeks to understand the earth and the natural processes that act within the earth's environment. The basic concepts of geology overlap several disciplines. Knowledge of geology provides a background for careers in geology and environment fields.

The Associate of Science degree with an emphasis in Geology prepares the student to pursue university studies leading to a bachelor's degree. The basic AS program in geology prepares the student for further education in fields such as geology, environmental science, or resource management. Students seeking advanced degrees in geological or environmental fields should select electives related to their field of interest.

Career Opportunities

Geology students may select a career in a wide range of geological and environmental fields. The student should bear in mind that most of these career areas require education or training beyond the Associate of Science degree. Career fields available to the geology student include:

- Civil Engineering
- Environmental Engineering
- Environmental Science
- Geochemistry
- Geology
- Geophysics
- Hydrogeology
- Land-use Planning
- Meteorology
- Mining Technology
- Oceanography
- Resource Management
- Seismology
- Soil Science
- Waste Management

AS Core Curriculum **45 credit hours**

Additional Graduation Requirement 3 credit hours

See page 45.

Recommended Electives **12 credit hours**

GEOL 1305 Natural Disasters 3
GEOL 1347 Introduction to Meteorology 3
GEOL 1402 Dinosaurs! 4
GEOL 1405 Earth Habitat 4
GEOL 1445 Oceanography 4
GEOL 2389 Academic Co-op Geology 3
GEOL 2409 Rocks, Minerals, and Gem Stones 4
GEOL 2470 Archaeology Science 4
CHEM 1411 General Chemistry I 4
CHEM 1412 General Chemistry II 4
ENGL 2311 Technical Writing 3
ENVR 1470 West Texas Natural History 4
MATH 1342 Statistics 3
MATH 2413 Calculus I 4
MATH 2414 Calculus II 4
PHYS 2425 University Physics I 4
PHYS 2426 University Physics II 4

MATHEMATICS

60 credit hours

Program Coordinators:

Nick Geller . . . . . .PRC-F235 . . . . . .972.377.1674
Raja Khoury . . . . . .SCC-J217 . . . . . .972.881.5909

Academic Advisor:

Windy Pitcock . . . . . .SCC-G104 . . . . . .972.881.5854

The Mathematics program offers courses that meet general mathematics requirements for associate degrees and for transfer and technical programs. More advanced courses prepare students for majors in mathematics, science, and engineering. All courses include calculator or computer use, and lab components emphasize applications of mathematical concepts. Mathematics instruction at CCCCD features a well-qualified instructional staff and a mathematics laboratory providing personal, computer, and audio-visual tutorial assistance.

Career Opportunities

Mathematics majors have many potential career opportunities. They may provide technical assistance in business, engineering, science, medicine, and many other fields. In addition, knowledge of mathematics plays a crucial role in providing access to a wide range of technical information in areas that are not so obviously dependent upon mathematics.

- Actuary
- Consultant
- Operations Researcher
- Statistician
- Teacher

NOTE: The second digit in a course number indicates the number of credit hours for that course.

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

MATH 1370 Introduction to the History of Mathematics . . .3
MATH 2305 Discrete Mathematics 3
MATH 2318 Linear Algebra 3
MATH 2320 Differential Equations 3
MATH 2412 Pre-Calculus for Mathematics and Science 4
MATH 2413 Calculus I 4
MATH 2414 Calculus II 4
MATH 2415 Calculus III 4
ENGL 2311 Technical Writing 3
ENGL 23XX Any Literature course 3
GEOL 2470 Archaeology Science 4
PHIL 2303 Introduction to Logic 3

NURSING

71 credit hours

Program Director:
Nell Ard, Ph.D., CNS, RNC . .CPC-E310 972-548-6883
Academic Advisor:
Lynne Meyer SCC-G107 972-881-5114

The Nursing Field of Study (FOS) was prepared by the Texas Higher Education Coordinating Board to delineate a set of courses which will satisfy the lower division requirements for a bachelor's degree in nursing. The courses identified in the FOS serve as the lower division requirements of all public four-year colleges and universities in the state of Texas for students seeking a Bachelor of Science in Nursing (BSN) degree and are fully transferable. The completed FOS is designed to facilitate the articulation of a nurse from the associate degree level to the BSN level. The FOS was also designed to facilitate transfer from one associate degree program to another within the state of Texas.

CCCCD's nursing program has adopted an integrated curriculum approach to the FOS. The completed Field of Study is designed to transfer to any Texas public college or university.

Career Opportunities

A nursing career is a wonderful opportunity to provide care and service to others. Currently, the United States is experiencing a shortage of nurses which has opened many career opportunities even for the beginning nurse. Nurses have a variety of settings they can work in: hospitals, clinics, home health agencies, schools, and industry. There are also a variety of areas to specialize in such as medical-surgical, maternal-child, pediatrics, critical care, psychiatric/mental health, perioperative, and community.

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Core curriculum courses are also included in the Field of Study listed below and will satisfy requirements for both the core curriculum and the Field of Study.

Field Of Study **35 credit hours**

Academic Courses
BIOL 1322 General Nutrition 3
BIOL 2401 Anatomy and Physiology I 4
BIOL 2402 Anatomy and Physiology II 4
BIOL 2420 Microbiology 4
CHEM 1405 or 1411 4
MATH 1342 Statistics 3
PSYC 2301 General Psychology 3
Nursing Content Courses
RNSG 1523 Introduction to Professional Nursing[1] 5
RNSG 2504 Care of the Client with Common Health Needs[2] . .5

[1] Corequisite courses include: RNSG 1219 and RNSG 1360
[2] Corequisite courses include: RNSG 1229 and RNSG 2361

PHYSICAL EDUCATION

60 credit hours

Program Coordinator:
Sherry Schumann . . . . . .SCC-A217A 972.516.5054
Academic Advisor:
Audrey Newsome . . . . . .CPC-A108B 972.548.6779
SCC-G104 . . . . . .972.881.5782

Students may earn an Associate of Science degree with an emphasis in Physical Education. The degree program emphasizes the inter-relatedness of several fields of study. Physical skills and knowledge are acquired through the physical education activity and theory classes.

Offerings in the humanities, social sciences, and biological sciences also prepare the student for a career in physical education.

Career Opportunities

Physical education offers challenging, rewarding careers. Listed below are some of the possibilities, many of which may require training beyond the Associate of Science degree.

- Aerobic Instructor
- Athletic Director
- Athletic Trainer
- Coach
- Fitness Center Instructor
- Personal Trainer

NOTE: The second digit in a course number indicates the number of credit hours for that course.

- Recreation Coordinator
- Sports Administrator
- Sports Medicine
- Teacher

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

Recommended Electives **12 credit hours**

PHED 1301 Foundations of Sport and Physical Activity 3
PHED 1304 Personal Health 3
PHED 1338 Concepts of Physical Fitness and Wellness 3
PHED 2389 Academic Co-op Physical Education 3
PHED/DANC Any Activity course 1
BIOL 2401 Anatomy and Physiology I 4
BIOL 2402 Anatomy and Physiology II 4
PSYC 2301 General Psychology 3

PHYSICS

60 credit hours

Program Coordinator:

Robert Forester . . . . . .SCC-B228 . . . . . .972.881.5712

Academic Advisor:

Windy Pitcock . . . . . .SCC-G104 . . . . . .972.881.5854

The science of physics seeks to understand the physical universe and deals with the behavior of matter and energy at the most fundamental level. By observation, physicists search for the basic principles that explain natural phenomena. The concepts of physics overlap many disciplines. Knowledge of physics provides a strong background for careers in science, engineering, computer technology, or education.

The Associate of Science degree with an emphasis in Physics prepares the student to pursue university studies leading to a bachelor's degree. The basic AS program, at the general physics level, prepares students for further education in fields such as biology, medicine, or secondary education. Students seeking a bachelor's degree in fields such as physics, engineering, or computer science will require the more advanced mathematics and physics.

Students planning to transfer to a college or university should check with the specific degree plan requirements of their intended major.

Degree Requirements

Depending on the career plans of the student, the physics emphasis will be at either the general physics or the university physics level.

Career Opportunities

Physics students may select a career in a wide range of scientific and technical fields. Students should bear in mind that most of these career areas require education or training beyond the Associate of Science degree. Depending on the career plans of the student, the Physics emphasis will be at the general physics or the college physics level. Career fields available to the physics student include:

- Aerospace Technology
- Astronomy
- Biophysics
- Chemistry
- Computer Science
- Elementary or Secondary Education
- EngineeringCivil, Electrical, or Industrial
- Geophysics
- Hydrogeology
- Medicine
- Meteorology
- Patent Law
- Physics

AS Core Curriculum **45 credit hours**
Additional Graduation Requirement 3 credit hours
See page 45.

General Physics Level

Students seeking degrees in biology or pre-medicine should select general physics courses.

University Physics Level

Students seeking advanced degrees in science and engineering fields should select advanced levels of physics and mathematics courses (such as the courses listed below) for the AS degree.

PHYS 2425 University Physics I
PHYS 2426 University Physics II
MATH 2413 Calculus I
MATH 2414 Calculus II

Recommended Electives **12 credit hours**

PHYS 1411 Elementary Astronomy 4
PHYS 2389 Academic Co-op Physics 3
CHEM 1411 General Chemistry I 4
CHEM 1412 General Chemistry II 4
ENGL 2311 Technical Writing 3
MATH 2318 Linear Algebra 3
MATH 2320 Differential Equations 3
MATH 2412 Pre-Calculus for Mathematics and Science 4
MATH 2415 Calculus III 4

NOTE: The second digit in a course number indicates the number of credit hours for that course.

PRE-PROFESSIONAL PROGRAMS FOR TRANSFER STUDENTS

Professional schools, such as architecture, business, chiropractic, dental, engineering, law, medicine, pharmacy, and veterinary medicine require varying amounts of undergraduate preparation. Many of the required courses at the freshman and sophomore levels are offered at CCCCD. It is the responsibility of students to know the exact requirements for admission to the specific professional school to which they are applying. For assistance, additional information, and specific Texas and out-of-state requirements, consult a CCCCD academic advisor or visit the Transfer Lab.

CENTER FOR ADVANCED STUDY IN MATHEMATICS AND NATURAL SCIENCES (CASMNS)

Collin County Community College has established a preferred curriculum for students preparing to enter professions that require an extensive background in mathematics and natural science. Based at the Spring Creek Campus, the new center includes advanced courses in biology, chemistry, mathematics, and physics for students in pre-professional majors.

Courses offered through the center include:

- BIOL 1406 and BIOL 1407
- CHEM 1411 and CHEM 1412
- MATH 2417 and MATH 2419
- PHYS 2425 and PHYS 2426

See the course descriptions section in the back of this catalog for complete information on these courses.

Upon successful completion of 18 or more credit hours from the designated courses, the student will receive special recognition by the college, and a notation will be included on their official CCCCD transcript. The current CCCCD Schedule of Classes will designate the courses that are offered in a particular semester. Student research opportunities are available for some students in the program.

Students pursuing the following programs should seriously consider applying for acceptance in the Center for Advanced Study in Mathematics and Natural Sciences (CASMNS)

- Graduate School in Mathematics or Natural Science
- Geo-Physical Sciences
- Pre-Dental
- Pre-Engineering
- Pre-Medicine
- Pre-Veterinary Medicine

Applicants are assessed on the following enrollment requirements and should:

- Be highly motivated majors in mathematics or natural science
- Maintain an overall grade point average of 3.0
- Have their transcripts evaluated to ensure that prerequisites have been met
- Be interviewed by a CASMNS instructor
- Be recommended by discipline faculty or be approved to participate by the Dean of Mathematics and Natural Sciences

PRE-ARCHITECTURE

Program Coordinator:

Warner Richeson . . . . . .PRC-H114 . . . . . .972.377.1689

CCCCD offers the general education courses commonly required for students entering a baccalaureate degree program leading to careers in architecture, landscape architecture, building construction, and urban and regional planning. Recommended courses include:

Design	**3 credit hours**
ARTS 1311	
English	**6 credit hours**
ENGL 1301 and 1302	
Mathematics	**8 credit hours**
MATH 2413 and 2414	
Physics	**8 credit hours**
PHYS 1401 and 1402	
Social and Behavioral Science	**15 credit hours**
GOVT 2301 and 2302	
HIST 1301 and 1302	
PSYC 2301	

PRE-BUSINESS

See page 51 for Business Field of Study.

Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, Pre-Veterinary Medicine

Program Coordinators:

Pre-Chiropractic, Pre-Pharmacy, Pre-Veterinary Medicine

Mary Weis . . . . . .SCC-K244 . . . . . .972.881.5725

Pre-Dental, Pre-Medicine

Jean Helgeson . . . . . .SCC-J138 . . . . . .972.881.5885

CCCCD offers the courses that are most commonly recommended for the first two years of Pre-Chiropractic, Pre-Dental, Pre-Medicine, Pre-Pharmacy, and Pre-Veterinary Medicine programs at most colleges and universities. These courses provide a basic foundation in medical science and help establish basic clinical reasoning and clinical skills.

Most English, mathematics, and science courses have pre-requisite requirements. See the course descriptions section in the back of this catalog to determine the order in which to take these courses. To be assured students make correct choices from the courses listed below, and/or to learn of different or additional course requirements from the college or university; students should visit with a CCCCD academic advisor.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Recommended courses include:

Biology **8-16 credit hours**

BIOL 1406 and 1407

Two (2) sophomore-level Biology courses

Chemistry **8-16 credit hours**

CHEM 1411, 1412, 2423, and/or 2425

English **6 credit hours**

ENGL 1301 and 1302

Mathematics **3-14 credit hours**

MATH 1316, 1342, 2413, and/or 2414

Physics **0-8 credit hours**

PHYS 1401, 1402, 2425, and/or 2426

Social/Behavioral Science **15 credit hours**

ANTH 2351, PSYC 2301, or SOCI 1301

GOVT 2301 and 2302

HIST 1301 and 1302

PRE-EDUCATION

See page 52 for Education.

PRE-ENGINEERING

See page 63-64 for Engineering and Engineering Technology.

PRE-LAW

Program Coordinator:

Peter Dawson . . . . . .SCC-K227 . . . . . .972.516.5031

Future Law School students should take courses that emphasize written and oral skills, research into problems facing society, logical reasoning, and business practices. For this occupation, students should consider taking courses in the following discipline areas:

- Accounting
- Business
- Economics
- English
- History
- Humanities
- Philosophy
- Psychology
- Sociology
- Speech

Course selections should always be discussed with a CCCCD academic advisor to ensure that students take the correct courses for their particular Pre-Law program.

An applicant for admission to a School of Law must have received, or have completed, all requirements for a baccalaureate degree from a college or university of approved standing prior to beginning work in a School of Law. Pre-Law students are encouraged to take the Law School Admission Test (LSAT) during the summer before their senior year.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

WORKFORCE EDUCATION programs

The Associate of Applied Science degree (AAS) is awarded upon completion of a prescribed program of study designed to prepare students to enter and compete in the job market. AAS curricula are designed to enable the graduate to enter an occupation with marketable skills, an acceptable level of technical competency, and the ability to communicate effectively.

The AAS degree is awarded to students who meet the specific degree requirements along with the graduation requirements listed on page 71. The Core Curriculum and the total number of hours required to graduate with an AAS degree vary among the programs;* however, a minimum of 18 credit hours must be earned in residency at CCCCD.

PROGRAM ADVISORY COMMITTEES

Instructional divisions in each technical program area use advisory committees for program development, evaluation, long-range planning, development of employment opportunities for graduates, and other program issues. These committees provide an essential link between the education institution and the business community to ensure that graduates are adequately prepared for employment. Members of the advisory committees are selected from related industry, prospective employers, and other knowledgeable community representatives.

Within each AAS program are suggested timelines for completion of degrees and certificates.

**Note: Applied Graphic Design Technology, Biotechnology, Child Development, Commercial Music (Music, Commercial), Computer Networking Technology, Dental Hygiene, Electronic Engineering Technology, Electronic Technology, Emergency Medical Services Professions, Fire Science, Interpreter Preparation Program/Deaf, Nursing, Respiratory Care, Semiconductor Manufacturing Technology, and Telecommunications Technology programs at CCCCD have specific core curriculum requirements. Please refer to the respective degree plan for details.*

COLLIN COUNTY COMMUNITY COLLEGE DISTRICT

AAS CORE CURRICULUM

English **3 credit hours**

ENGL	1301	Composition/Rhetoric I

Speech Communications **3 credit hours**

Select one course:

SPCH	1311	Fundamentals of Speech Communication
SPCH	1315	Public Speaking I
SPCH	1321	Business and Professional Speaking

Mathematics **3 credit hours**

Select one course:

MATH	1xxx	College-level mathematics course
MATH	2xxx	College-level mathematics course

Math requirements may vary from the core curriculum. Check each degree plan.

Computer Literacy **3 credit hours**

COSC	1300	Computer Essentials

Economics **3 credit hours**

Select one course:

ECON	1301	Introduction to Economics
ECON	2301	Principles of Macroeconomics
ECON	2302	Principles of Microeconomics

Humanities/Fine Arts **3 credit hours**

Select one course:

ARTS	1301	Art Appreciation
ARTS	1303	Art History I
ARTS	1304	Art History II
DRAM	1310	Introduction to Theatre
HUMA	1301	Introduction to the Humanities
HUMA	1302	Cultural Diversity
MUSI	1306	Music Appreciation
MUSI	1307	Introduction to Music Literature
PHIL	xxxx	Any philosophy course

Behavioral Science **3 credit hours**

Select one course:

PSYC	2301	General Psychology
PSYC	2302	Applied Psychology

Physical Education/Dance **1 credit hour minimum**

Select one course:

PHED/DANC		Any activity course
PHED	1338	Concepts of Physical Fitness and Wellness

AAS Core Curriculum **22 credit hours minimum**

CERTIFICATE PROGRAMS

CCCCD offers certificate programs designed to meet specific employment needs of the community. Students who enroll in certificate programs are generally interested in re-entering the job market after an absence, changing careers, or upgrading job-related skills in order to enhance employment specialization. Although certificates are normally one year in length, the specific number of credit hours varies by program area.

MARKETABLE SKILLS ACHIEVEMENT AWARDS

A Marketable Skills Achievement Award is a sequence of credit courses totaling 9-14 semester credit hours. CCCCD offers Marketable Skills Achievement Awards for Child Development, contact Elaine Boski-Wilkinson at 972.881.5967; and Office Systems Technology, contact Diana Ramsower at 972.881.5835 or Mary Jane Tobaben 972-881-5170.

Applied Graphic Design Technology

Program Coordinator:

Gaye Cooksey . . . . . .SCC-K119 . . . . . .972.881.5968

Academic Advisor:

Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

The Applied Graphic Design Technology program trains today's artists and designers in the communication media of the future as well as the present computer-aided communication design.

The **Digital Video** program focuses on developing the concept, design, and production skills necessary for creating digital video content by learning how to create storyboards, work with video cameras and lighting, and editing video with current software tools. In the **Multimedia** specialization, students learn to create interactive multimedia content. The **Animation** specialization covers a broad range of skills including concept development, 2-D and 3-D computer graphics, video/compositing, digital audio and 2-D/3-D animation. The **Commercial Photography** specialization combines the study of traditional and digital photography. The **Illustration** specialization prepares students for careers in pictorial illustration, advertising art, and technical/industrial visualization using traditional and digital media. The **Internet/Web Design** specialization is a quickly evolving field requiring both traditional and cutting-edge skills such as concept development, graphic design, web graphics preparation, HTML/JavaScript, and web animation. The **3-D Entertainment Animation** certificate emphasizes 3-D animation incorporating high-end 3-D software. Students will develop skills in the concept and execution of 3-D animation targeted towards the entertainment industry as well as advertising and corporate communication. Skills are developed in conceptualization, 2-D and 3-D computer graphics, 3-D animation techniques and digital video compositing.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

AAS – Applied Graphic Design Technology

67 credit hours

FIRST YEAR

First Semester

ARTC 1325 Introduction to Computer Graphics – Print
ARTC 2311 History of Communication Graphics
ARTS 1301 Art Appreciation[1]
ARTS 1316 Drawing I
ENGL 1301 Composition/Rhetoric I

Second Semester

ARTC 1302 Digital Imaging I
ARTC 1305 Basic Graphic Design
ARTC 1321 Illustration Techniques
ARTC 1353 Computer Illustration I
PHED/DANC Any activity course[2]
SPCH 1311 Fundamentals of Speech Communication[3]

SECOND YEAR

First Semester

ARTC 1327 Typography
ARTC 1349 Art Direction I
ARTC 2309 Electronic Pre-press
ARTC 2313 Digital Publishing II
ARTS 2356 Photography I
MATH 1332 Contemporary Mathematics[4]

Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
ARTC 2349 Art Direction II
ECON 1301 Introduction to Economics[5]
PSYC 2302 Applied Psychology[6]
Elective *
Elective *

1 May substitute ARTS 1303, or 1304, DRAM 1310, HUMA 1301 or 1302, MUSI 1306, or1307, or any PHIL course
2 May substitute PHED 1338
3 May substitute SPCH 1315 or 1321
4 May substitute a higher level mathematics course – MATH 1314 is recommended for transfer students
5 May substitute ECON 2301 or 2302
6 May substitute PSYC 2301
* Elective (6 credit hours): ARTC 2340, ARTS 1317, 2311, 2316, or 2333, or GRPH 1380

Digital Video Specialization

60 credit hours

FIRST YEAR

Summer

ARTC 1325 Introduction to Computer Graphics – Print
DRAM 2366 History of Filmmaking I
IMED 1211 Storyboard

First Semester

ARTC 1302 Digital Imaging I
MATH 1332 Contemporary Mathematics[1]
MUSC 2351 Audio for Video
SPCH 1311 Fundamentals of Speech Communication[2]
Elective *

Second Semester

ECON 1301 Introduction to Economics[3]
PHED/DANC Any activity course[4]
PSYC 2301 General Psychology[5]
PHTC 1345 Illustrative Photography I
Elective *

SECOND YEAR

First Semester

ARTS 1301 Art Appreciation[6]
ENGL 1301 Composition/Rhetoric I
FLMC 1331 Computers in Video Production I (After Effects)
IMED 1351 Digital Video

Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
FLMC 2379 Digital Video Portfolio
IMED 2313 Project Analysis and Design
IMED 2341 Advanced Digital Video

1 May substitute a higher level mathematics course – MATH 1314 is recommended for transfer students
2 May substitute SPCH 1315 or 1321
3 May substitute ECON 2301 or 2302
4 May substitute PHED 1338
5 May substitute PSYC 2302
6 May substitute ARTS 1303 or 1304, DRAM 1310, HUMA 1301 or 1302, MUSI 1306 or 1307, or any PHIL course
* Elective (6 credit hours): ARTC 2340, or any other ARTC course approved by program coordinator, ARTS 2356, COMM 1316, DRAM 1341 or 2367, GRPH 1380, or one PHTC course

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Multimedia Specialization

69 credit hours

FIRST YEAR

Summer

ARTC 1325	Introduction to Computer Graphics – Print
ARTC 2311	History of Communication Graphics
IMED 1211	Storyboard

First Semester

ARTC 1301	Basic Animation
ARTC 1302	Digital Imaging I
ENGL 1301	*Composition/Rhetoric I*
MUSC 2351	Audio for Video
PHED/DANC	*Any activity course*[1]
SPCH 1311	*Fundamentals of Speech Communication*[2]

Second Semester

ARTC 1353	Computer Illustration I
ARTC 2371	Advanced 2-D Computer Animation
ARTS 1316	Drawing I
IMED 2301	Instructional Design
MATH 1332	*Contemporary Mathematics*[3]
Elective *	

SECOND YEAR

First Semester

ARTC 1345	3-D Modeling and Rendering
ARTC 2378	Animation on the Web
ECON 1301	*Introduction to Economics*[4]
IMED 1305	Multimedia Authoring I

Second Semester

ARTC 1341	3-D Animation I (Cinema 4-D XL)[5]
ARTC 2335	Portfolio Development for Graphic Design (Capstone)
ARTS 1301	*Art Appreciation*[6]
IMED 2313	Project Analysis and Design
PSYC 2301	*General Psychology*[7]

1 May substitute PHED 1338

2 May substitute SPCH 1315 or 1321

3 May substitute a higher level of mathematics – MATH 1314 is recommended for transfer students

4 May substitute ECON 2301 or 2302

5 May substitute ARTC 1341 (Maya)

6 May substitute ARTS 1303 or 1304, DRAM 1310, HUMA 1301 or 1302, MUSI 1306 or 1307, or any PHIL course

7 May substitute PSYC 2302

* Elective (3 credit hours): Any PHTC course

CERTIFICATES

Applied Graphic Design Technology Certificate

39 credit hours

FIRST YEAR

First Semester

ARTC 1325	Introduction to Computer Graphics – Print
ARTC 2311	History of Communication Graphics
ARTS 1316	Drawing I

Second Semester

ARTC 1302	Digital Imaging I
ARTC 1305	Basic Graphic Design
ARTC 1321	Illustration Techniques
ARTC 1353	Computer Illustration I

SECOND YEAR

First Semester

ARTC 1327	Typography
ARTC 1349	Art Direction I
ARTC 2309	Electronic Pre-press
ARTC 2313	Digital Publishing II

Second Semester

ARTC 2335	Portfolio Development for Graphic Design (Capstone)
ARTC 2349	Art Direction II

Animation Specialization

41 credit hours

FIRST YEAR

First Semester

ARTC 1325	Introduction to Computer Graphics – Print
ARTC 1371	History of Animation
IMED 1211	Storyboard

Second Semester

ARTC 1302	Digital Imaging I
ARTC 1345	3-D Modeling and Rendering
IMED 1351	Digital Video

Summer

ARTC 1301	Basic Animation
MUSC 2351	Audio for Video

SECOND YEAR

First Semester

ARTC 1341	3-D Animation I (Cinema 4-D XL)
ARTC 2378	Animation on the Web
FLMC 1331	Computers in Video Production I (After Effects)

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Courses in red have been added since the catalog was printed.

Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
ARTC 2341 3-D Animation II (Cinema 4-D XL)
IMED 2313 Project Analysis and Design

Digital Video Specialization

38 credit hours

FIRST YEAR

First Semester

ARTC 1325 Introduction to Computer Graphics – Print
ARTC 2311 History of Communication Graphics
MUSC 2351 Audio for Video

Second Semester

ARTC 1302 Digital Imaging I
ARTC 1353 Computer Illustration I
DRAM 2366 History of Film Making I
IMED 1211 Storyboard

SECOND YEAR

First Semester

FLMC 1331 Computers in Video Production I (After Effects)
IMED 1351 Digital Video
PHTC 1345 Illustrative Photography I

Second Semester

FLMC 2379 Digital Video Portfolio (Capstone)
IMED 2313 Project Analysis and Design
IMED 2341 Advanced Digital Video

Gaming Graphics and Animation Specialization

38-40 credit hours

FIRST YEAR

Summer

ARTC 1325 Introduction to Computer Graphics – Print
IMED 1211 Storyboard

First Semester

ARTC 1302 Digital Imaging I
ARTC 1345 3-D Modeling and Rendering
ARTC 1353 Computer Illustration I
COSC 1420 Introduction to Programming Using C++[1]

Second Semester

ARTC 1341 3-D Animation I (Maya)
COSC 2420 Introduction to Object-Oriented Programming – C++[2]
IMED 2301 Instructional Design

SECOND YEAR

First Semester

ARTC 2341 3-D Animation II (Maya)
IMED 1343 Digital Sound

Second Semester

ARTC 2379 Computer Game Development (Capstone)
FLMC 2331 Computers in Video Production II (Maya)

[1] May substitute COSC 1320
[2] May substitute COSC 2320

Illustration Specialization

39 credit hours

FIRST YEAR

First Semester

ARTC 1325 Introduction to Computer Graphics – Print
ARTC 2311 History of Communication Graphics
ARTS 1316 Drawing I

Second Semester

ARTC 1302 Digital Imaging I
ARTC 1305 Basic Graphic Design
ARTC 1321 Illustration Techniques

SECOND YEAR

First Semester

ARTC 1345 3-D Modeling and Rendering
ARTC 1353 Computer Illustration I
ARTC 2331 Illustration Concepts
ARTS 2323 Life Drawing I

Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
ARTC 2345 Advanced 3-D Modeling and Rendering
ARTC 2349 Art Direction II

Internet/Web Design Specialization

41 credit hours

FIRST YEAR

First Semester

ARTC 1325 Introduction to Computer Graphics – Print
ARTC 2311 History of Communication Graphics
IMED 2301 Instructional Design

Second Semester

ARTC 1302 Digital Imaging I
IMED 1211 Storyboard
IMED 1316 Web Page Design I

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

SECOND YEAR

First Semester

ARTC 1353 Computer Illustration I
ARTC 2378 Animation on the Web
IMED 2315 Web Page Design II
MUSC 2351 Audio for Video

Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
IMED 2313 Project Analysis and Design
IMED 2341 Advanced Digital Video
IMED 2349 Internet Communications

Multimedia Specialization

41 credit hours

FIRST YEAR

First Semester

ARTC 1325 Introduction to Computer Graphics – Print
ARTC 2311 History of Communication Graphics
IMED 1211 Storyboard
IMED 2301 Instructional Design

Second Semester

ARTC 1301 Basic Animation
ARTC 1302 Digital Imaging I
ARTC 1345 3-D Modeling and Rendering

SECOND YEAR

First Semester

ARTC 2371 Advanced 2-D Computer Animation
ARTC 2378 Animation on the Web
IMED 1305 Multimedia Authoring I
MUSC 2351 Audio for Video

Second Semester

ARTC 1341 3-D Animation I (Cinema 4-D XL)[1]
ARTC 2335 Portfolio Development for Graphic Design (Capstone)
IMED 2313 Project Analysis and Design

[1] May substitute ARTC 1341 (Maya)

3-D Entertainment Animation Certificate

41 credit hours

FIRST YEAR

Summer

ARTC 1325 Introduction to Computer Graphics – Print
FLMC 1301 History of Animation
IMED 1211 Storyboard

First Semester

ARTC 1302 Digital Imaging I
ARTC 1345 3-D Modeling and Rendering
ARTC 1353 Computer Illustration I

Second Semester

ARTC 1301 Basic Animation
ARTC 1341 3-D Animation I (Maya)

SECOND YEAR

First Semester

ARTC 2341 3-D Animation II (Maya)
ARTC 2372 Character Animation and Rendering
FLMC 1331 Computers in Video Production I (After Effects)
IMED 1351 Digital Video

Second Semester

ARTC 2335 Portfolio Development for Graphic Design (Capstone)
FLMC 2331 Computers in Video Production II (Maya)

BIOTECHNOLOGY

Program Coordinator:

Bridgette Kirkpatrick . . . .SCC-I208 . . . . . .972.578.5513

Academic Advisor:

Windy Pitcock . . . . . .SCC-G104 . . . . . .972.881.5854

CCCCD's Biotechnology program prepares students for entry-level positions in biological research and industrial laboratories. Returning students can also benefit from the new methods and technologies related to agriculture, medicine, pharmaceuticals, and other applications.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

Career Opportunities

Biotechnology laboratory positions are available at colleges, universities, medical schools, and pharmaceutical and industrial companies. Additionally, other new occupations are rapidly developing in Texas and other parts of the nation. Positions currently within the biotechnology field include:

- Biotechnology Production/QC Assistant/Technician
- Biotechnology Research Assistant/Technician
- Environmental Technical Work (Waste Products, Pollutants)
- Federal Government Technical Work in Agriculture, Defense, and Interior Departments
- Forensic Laboratory Assistant/Technician
- Laboratory Management and Support Positions

NOTE: The second digit in a course number indicates the number of credit hours for that course.

- Medical Research Assistant/Technician
- Microbiological Research Assistant/Technician
- Pharmaceutical Research Assistant/Technician
- Technical Work in Manufacturing, Chemical, and Food Processing Industries

AAS – Biotechnology

67 credit hours

FIRST YEAR

First Semester

BIOL 1406 General Biology I
BITC 1311 Introduction to Biotechnology
CHEM 1411 General Chemistry I[1]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra[2]

Second Semester

BIOL 1407 General Biology II[3]
BITC 1402 Biotechnology Laboratory Methods and Techniques
CHEM 1412 General Chemistry II[4]
COSC 1300 Computer Essentials

Summer

HUMA 1301 Introduction to the Humanities[5]
PHED/DANC Any activity course[6]
Elective*

SECOND YEAR

First Semester

BIOL 2420 Microbiology[7]
BITC 1401 Biotechnology Laboratory Instrumentation
BITC 2431 Cell Culture Techniques
PSYC 2301 General Psychology

Second Semester

BITC 1391 Special Topics in Biological Technology/Technician
BITC 2387 Internship–Biological Technology/Technician (Capstone)
BITC 2401 Molecular Biology Techniques
SPCH 1311 Fundamentals of Speech Communication

[1] May substitute CHEM 1405 (for non-transfer students)
[2] May substitute MATH 1342
[3] May substitute BIOL 1411, 1470, 2401, or 2404
[4] May substitute CHEM 1419 or 1407 (for non-transfer students)
[5] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306, or 1307, or any PHIL course.
[6] May substitute PHED 1338
[7] Prerequisites waived for students pursuing an AAS in Biotechnology.

* Electives (3 credit hours): BITC 2386, ENGL 2311, or ENVR 1401.

NOTE: A course may not be counted as both an elective and a biology requirement.

Biotechnology Certificate

29 credit hours

FIRST YEAR

First Semester

BIOL 1406 General Biology I
BITC 1311 Introduction to Biotechnology
BITC 1402 Biotechnology Laboratory Methods and Techniques
CHEM 1411 General Chemistry I[1]

Second Semester

BIOL 2420 Microbiology[2]
BITC 2386 Internship–Biological Technology/Technician (Capstone)
BITC 2401 Molecular Biology Techniques[3]
Elective*

[1] May substitute CHEM 1405 (for non-transfer students)
[2] Prerequisites waived for students pursuing a Biotechnology Certificate
[3] May substitute BITC 2431

* Electives (3 credit hours): BIOL 2404, COSC 1300, ENGL 2311, or ENVR 1401

NOTE: A course may not be counted as both an elective and a biology requirement.

CHILD DEVELOPMENT

Also a Tech Prep Program
Also a Marketable Skills Achievement Award Program (refer to page 72).

Program Coordinator:

Elaine Boski-Wilkinson . . .SCC-B132 . . . . . .972.881.5967

Academic Advisor:

Carie Andrews . . . . . .SCC-G106 . . . . . .972.881.5773

The Child Development degree and certificate programs are designed to prepare individuals for entry-level positions working with young children and their families. The coursework can also be applicable as in-service training for teachers, administrators, nannies, and family day home providers. A developmental approach is emphasized which promotes optimal physical, social, emotional, and cognitive growth of children. Students learn management skills that allow them to provide quality programs in safe, nurturing environments.

The Child Development Associate (CDA) program provides performance-based training, assessment, and credentialing of

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

childcare professionals who work with children from birth through age five. These caregivers demonstrate their ability to nurture children's physical, social, emotional, and intellectual growth in a child development framework.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

Notes:

- *"TECA" is the prefix for transfer courses that were formerly "CDEC."*
- *After completing TECA 1311, students are required to complete a one-hour lab component with each CDEC and TECA course.*

Program Requirements:

To participate in the Child Development Lab School and receive credit for the lab component of courses, the following requirements must be met:

1. Enroll in a CCCCD child development course.
   Within the first week of the first child development course, provide a copy of acceptable tuberculosis test results. Continuing students must submit acceptable tuberculosis results every two years.
3. Complete and sign a student record form as a contract to ensure the following:
   - Verification that the student has read and agrees to abide by the Texas Minimum Standards for day care centers
   - Verification that the student has read and agrees to follow the laboratory student guidelines
   - Information provided to a criminal history check by the Texas Department of Protective and Regulatory Services
   - Confirmation that confidentiality and professional discretion will be observed at all times
   - Notarized affidavit
   - Personal release for videotaping for instructional purposes

Our records should always contain current personal information. It is the student's responsibility to keep this information current.

Career Opportunities

The Child Development degree and certificates are designed to provide the necessary preparation to work as a day care director, teacher's aide, director/assistant director or manager of children's programs, or an educational director. The skills acquired will be directly applicable in a variety of facilities, including:

- Before and After School Programs
- Child Care Centers
- Church-sponsored Child Care
- Community Center Programs
- Corporate-sponsored Child care
- Employer-sponsored Child Care
- Family Day Homes
- Hospital-sponsored Child Care
- Infant/Toddler Programs
- In-Home Care Giver or Nanny
- Parent and Child Study Programs
- Preschool Programs
- Public School Paraprofessional/Teacher's Aide

AAS – Child Development

65 credit hours

FIRST YEAR

First Semester

ENGL 1301 Composition/Rhetoric I
CDEC 1319 Child Guidance
CDEC 1323 Observation and Assessment
TECA 1311 Introduction to Early Childhood Education[1]
TECA 1354 Child Growth and Development[1]

Second Semester

CDEC 2326 Administration of Programs for Children I
PHED/DANC Any activity course[2]
PSYC 2302 Applied Psychology[3]
SPCH 1311 Fundamentals of Speech Communication[4]
TECA 1303 Family and the Community[1]
Elective*

SECOND YEAR

First Semester

COSC 1300 Computer Essentials
CDEC 1313 Curriculum Resources for Early Childhood Programs
CDEC 1370 Prevention of Child Abuse
CDEC 2328 Administration of Programs for Children II
TECA 1318 Nutrition, Health, and Safety
Elective*

Second Semester

CDEC 2336 Administration of Programs for Children III
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
ECON 1301 Introduction to Economics[5]
HUMA 1301 Introduction to the Humanities[6]
MATH 1332 Contemporary Mathematics[7]
Elective*

[1] Tech Prep course which may have been completed in high school
[2] May substitute PHED 1338
[3] May substitute PSYC 2301

NOTE: The second digit in a course number indicates the number of credit hours for that course.

[4] May substitute SPCH 1315 or 1321

[5] May substitute ECON 2301 or 2302

[6] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course.

[7] May substitute MATH 1324 or 1314 - recommended for transfer students.

* Electives (select 9 credit hours): CDEC 1315, 1317, 1327, 1330, 1334, 1342, 1357, 1358, 1359, 1392, 1394, 1396, 2322, 2324, or 2385

CERTIFICATES

Child Development Associate Certificate

16 credit hours

FIRST YEAR

First Semester

CDEC 1317 Child Development Associate Training I
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
CDEC 2322 Child Development Associate Training II
CDEC 2324 Child Development Associate Training III
TECA 1318 Nutrition, Health, and Safety
TECA 1354 Child Growth and Development[1]

[1] Tech Prep course which may have been completed in high school

Child Development Certificate

28 credit hours

FIRST YEAR

First Semester

CDEC 1313 Curriculum Resources for Early Childhood Programs
CDEC 1323 Observation and Assessment
TECA 1311 Introduction to Early Childhood Education[1]
TECA 1318 Nutrition, Health, and Safety
TECA 1354 Child Growth and Development[1]

Second Semester

CDEC 1319 Child Guidance
CDEC 1335 Early Childhood Development: 3-5 years
CDEC 1359 Children with Special Needs
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
TECA 1303 Family and the Community[1]

[1] Tech Prep course which may have been completed in high school

Early Childhood Administrator Specialization

28 credit hours

FIRST YEAR

First Semester

CDEC 1323 Observation and Assessment
CDEC 2326 Administration of Programs for Children I
TECA 1311 Introduction to Early Childhood Education[1]
TECA 1318 Nutrition, Health, and Safety
TECA 1354 Child Growth and Development[1]

Second Semester

CDEC 1370 Prevention of Child Abuse
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
CDEC 2328 Administration of Programs for Children II
CDEC 2336 Administration of Programs for Children III
TECA 1303 Family and the Community[1]

[1] Tech Prep course which may have been completed in high school

Early Childhood Special Educator Specialization

28 credit hours

FIRST YEAR

First Semester

CDEC 1319 Child Guidance
CDEC 1323 Observation and Assessment
CDEC 1359 Children with Special Needs
TECA 1311 Introduction to Early Childhood Education[1]
TECA 1354 Child Growth and Development[1]

Second Semester

CDEC 1340 Instructional Techniques for Children with Special Needs
CDEC 1370 Prevention of Child Abuse
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
TECA 1303 Family and the Community[1]
TECA 1318 Nutrition, Health, and Safety

[1] Tech Prep course which may have been completed in high school

Infant and Toddler Educator Specialization

28 credit hours

FIRST YEAR

First Semester

CDEC 1321 The Infant and Toddler
CDEC 1323 Observation and Assessment
CDEC 1370 Prevention of Child Abuse
TECA 1303 Family and the Community[1]
TECA 1311 Introduction to Early Childhood Education[1]

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Second Semester

CDEC 1339 Early Childhood Development: 0-3 Years
CDEC 1359 Children with Special Needs
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
TECA 1318 Nutrition, Health, and Safety
TECA 1354 Child Growth and Development[1]

[1] Tech Prep course which may have been completed in high school

School-Age Educator Specialization

28 credit hours

FIRST YEAR

First Semester

CDEC 1334 School-Age Activities and Group Dynamics
CDEC 2341 The School Age Child
TECA 1311 Introduction to Early Childhood Education[1]
TECA 1318 Nutrition, Health, and Safety
TECA 1354 Child Growth and Development[1]

Second Semester

CDEC 1319 Child Guidance
CDEC 1330 Growth and Development: 6-14 Years
CDEC 1359 Children with Special Needs
CDEC 2166 Practicum - Child Development and Early Childhood - Provider/Assistant (Capstone)
TECA 1303 Family and the Community[1]

[1] Tech Prep course which may have been completed in high school

COMPUTER-AIDED DRAFTING AND DESIGN

Also a Tech Prep Program

Program Coordinator:

Warner Richeson . . . . . .PRC-H114 . . . . . .972.377.1689

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

High-tech industries are constantly creating new career opportunities in exciting, highly specialized fields. The degree opportunities in Computer-Aided Drafting and Design (CADD) provide both an educational foundation in computer-aided design and insight into current industry practices. Students in CCCCD's intensive CADD hands-on training program are taught the skills a designer, CADD operator, architect, or engineer needs for successful CADD operations.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Enjoy a profitable career in a modern business environment. Expanding job market possibilities related to drafting and design are available in:

- Aircraft Industry
- Architectural Firms
- Computer Centers
- Electronics Firms
- Governmental Agencies
- Manufacturing Firms
- Printed Circuit Board Design Companies
- Research Organizations
- Semiconductor Manufacturing Firms
- Telecommunications Industry

AAS – Computer-Aided Drafting and Design

64 credit hours

FIRST YEAR

First Semester

DFTG 1309 Basic Computer-Aided Drafting[1, 2]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra
PHYS 1401 General Physics I
SPCH 1311 Fundamentals of Speech Communication[3]

Second Semester

DFTG 1305 Technical Drafting[1]
DFTG 2319 Intermediate Computer-Aided Drafting[1]
ECON 1301 Introduction to Economics[4]
MATH 1316 Trigonometry
PHYS 1402 General Physics II

SECOND YEAR

First Semester

CETT 1409 DC-AC Circuits
DFTG 2332 Advanced Computer-Aided Drafting
HUMA 1301 Introduction to the Humanities[5]
PHED/DANC Any activity course[6]
Elective*
Elective*

Second Semester

DFTG 2336 Computer-Aided Drafting Programming
DFTG 2381 Cooperative Education - Drafting (Capstone)
PSYC 2302 Applied Psychology[7]
Elective*
Elective*

[1] Tech Prep course which may have been completed in high school
[2] May be substituted for COSC 1300

NOTE: The second digit in a course number indicates the number of credit hours for that course.

[3] May substitute SPCH 1315 or 1321
[4] May substitute ECON 2301 or 2302
[5] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[6] May Substitute PHED 1338
[7] May substitute PSYC 2301
* Electives (12 credit hours): BMGT 2331, BUSI 1301 or 2301, DFTG 1317, 1371, 1380, 1391, 2312, 2328, 2340 or 2352, or ENGL 2311

AAS – Electronic Design

72 credit hours

FIRST YEAR

First Semester

CETT 1325 Digital Fundamentals
CETT 1403 DC Circuits[1]
DFTG 1309 Basic Computer-Aided Drafting[1, 2]
DFTG 1358 Electrical/Electronics Drafting
HUMA 1301 Introduction to the Humanities[3]
MATH 1314 College Algebra

Second Semester

CETT 1405 AC Circuits[1]
CETT 1421 Electronic Fabrication
CETT 1429 Solid State Devices[1]
DFTG 2304 Printed Circuit Board Design
MATH 1316 Trigonometry
Elective*

SECOND YEAR

First Semester

CETT 1457 Linear Integrated Circuits
DFTG 2356 Advanced Printed Circuit Board Design
ECON 1301 Introduction to Economics[4]
PHED/DANC Any activity course[5]
SPCH 1311 Fundamentals of Speech Communication[6]
Elective*

Second Semester

DFTG 2381 Cooperative Education - Drafting (Capstone)
ENGL 1301 Composition/Rhetoric I
PSYC 2302 Applied Psychology[7]
Elective*
Elective*

[1] Tech Prep course which may have been completed in high school
[2] May be substituted for COSC 1300
[3] May substitute ARTS 1301, 1303 or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[4] May substitute ECON 2301 or 2302
[5] May substitute PHED 1338
[6] May substitute SPCH 1315 or 1321
[7] May substitute PSYC 2301
* Electives (12 credit hours): BMGT 2331, BUSI 1301 or 2301, DFTG 1171, 1172, 1305, 1394, 2319, 2332 or 2336, or ENGL 2311

CERTIFICATES

Computer-Aided Drafting and Design Certificate

30 credit hours

FIRST YEAR

First Semester

DFTG 1309 Basic Computer-Aided Drafting[1]

Second Semester

DFTG 1305 Technical Drafting[1]
DFTG 2319 Intermediate Computer-Aided Drafting[1]

SECOND YEAR

First Semester

DFTG 2312 Technical Illustration
DFTG 2332 Advanced Computer-Aided Drafting
Elective*

Second Semester

DFTG 1391 Special Topics in Drafting Intermediate Pro/Engineering, 3-D Studio Max, or Microstation
DFTG 2336 Computer-Aided Drafting Programming (Capstone)
Elective*
Elective*

[1] Tech Prep course which may have been completed in high school
* Electives (9 credit hours): DFTG 1317, 1321, 1348, 1356, 1380, 2310, 2328, 2340, 2350, 2352 or 2381

AutoCAD Specialization

15 credit hours

FIRST YEAR

First Semester

DFTG 1309 Basic Computer-Aided Drafting[1]

Second Semester

DFTG 2319 Intermediate Computer-Aided Drafting[1]

SECOND YEAR

First Semester

DFTG 1391 Special Topics in Drafting
DFTG 2332 Advanced Computer-Aided Drafting
DFTG 2336 Computer-Aided Drafting Programming (Capstone)

[1] Tech Prep course which may have been completed in high school

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Electronic Design Automation Certificate

38 credit hours

FIRST YEAR

First Semester

CETT 1325 Digital Fundamentals
CETT 1403 DC Circuits
DFTG 1309 Basic Computer-Aided Drafting[1]
DFTG 1358 Electrical/Electronics Drafting

Second Semester

CETT 1405 AC Circuits[1]
CETT 1421 Electronic Fabrication
CETT 1429 Solid State Devices
DFTG 2304 Printed Circuit Board Design

SECOND YEAR

First Semester

CETT 1457 Linear Integrated Circuits
DFTG 1394 Special Topics in Electrical/Electronics Drafting
DFTG 2356 Advanced Printed Circuit Board Design (Capstone)

[1] Tech Prep course which may have been completed in high school

Enhanced Skills Certificate

9 credit hours

The Enhanced Skills Certificate in Computer-Aided Drafting and Design provides additional training in specific job skills that supplement those acquired within the AAS degree program. Students will have an opportunity to acquire those employment-related skills while completing the AAS degree requirements or subsequent to earning their AAS in Computer-Aided Drafting and Design.

FIRST YEAR

First Semester

DFTG 1391 Special Topics in Drafting - 3-D Studio Max
DFTG 2312 Technical Illustration
DFTG 2340 Solid Modeling/Design Pro/Engineer

COMPUTER INFORMATION SYSTEMS

Also a Tech Prep Program

Program Coordinator:

Mary Emerson . . . . . .PRC-H111 . . . . . .972.377.1687

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

Computer Information Systems is an exciting field that presents many opportunities for a student who is proficient in both applications and computer systems. The skills acquired in this program will enable the student to solve problems that are encountered when working in this ever-changing and growing occupation.

This degree program offers specializations in computer systems and microcomputer applications. Areas of study include business applications, introduction to business programming, management skills, microcomputer applications, financial skills, and technical skills. The degree can provide a broad business background and professional skills needed to succeed in a career in information technologies.

Students in the Computer Information Systems program receive basic instruction and pre-employment training for positions requiring high degrees of skill and technical knowledge. This curriculum will extend or improve the existing occupational competence of employed persons. Students will prepare for entry into the workforce by experiencing practical applications and "real world" simulations appropriate to the specialization.

Two certificates are also offered, which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing one or more certificates students can continue at CCCCD and receive an AAS degree in Computer Information Systems.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Options:

The Computer Information Systems program prepares students for many new job opportunities, such as:

- Computer Operator
- PC Service Representative
- PC Support Specialist
- Office Manager

The program also prepares students to work in a variety of businesses and industries, including manufacturing firms, banks and insurance companies, data processing service organizations, wholesale and retail business, or government agencies.

AAS – Computer Information Systems

65 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[1]
ITSC 1321 PC Operating Systems – Windows
MATH 1324 Pre-Calculus for Business and Economics

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Second Semester

CPMT 1411 Introduction to Computer Maintenance
IMED 1301 Introduction to Multimedia[2]
ITSE 1331 Introduction to Visual Basic Programming
ITSW 1304 Introduction to Spreadsheets – Excel
PHED/DANC Any activity course[3]
SPCH 1311 Fundamentals of Speech Communication[4]

Summer

ECON 1301 Introduction to Economics[5]
PSYC 2301 General Psychology[6]

SECOND YEAR

First Semester

BCIS 2390 Systems Analysis and Design
ENGL 2311 Technical Writing
ITSW 1307 Introduction to Database
Elective*
Elective*

Second Semester

IMED 2309 Internet Commerce
ITMC 1301 Microsoft Windows Network and Operating System Essentials
ITSC 1327 Multi-user Operating Systems
ITSW 2380 Cooperative Education - Data Processing Technology/Technician Capstone)

1 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
2 Tech Prep course which may have been completed in high school
3 May substitute PHED 1338
4 May substitute SPCH 1315 or 1321
5 May substitute ECON 2301
6 May substitute PSYC 2302
* Electives (6 credit hours): Any COSC, GRPH, IMED, ITSE, or ITSW course not listed above

Microcomputer Applications Specialization

64 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[1]
ITSC 1321 PC Operating Systems – Windows
MATH 1324 Pre-Calculus for Business and Economics

Second Semester

IMED 1301 Introduction to Multimedia[2]
IMED 1316 Web Page Design I
ITSW 1304 Introduction to Spreadsheets – Excel
POFI 2301 Word Processing – MS Word
SPCH 1311 Fundamentals of Speech Communication[3]

Summer

PHED/DANC Any activity course[4]
PSYC 2301 General Psychology[5]

SECOND YEAR

First Semester

ACCT 2301 Financial Accounting
GRPH 1325 Digital Imaging I
GRPH 1359 Object-Oriented Computer Graphics
ITSW 1307 Introduction to Database
Elective*

Second Semester

ECON 1301 Introduction to Economics[6]
ITSC 2380 Cooperative Education – Computer and Information Sciences, General (Capstone)
ITSE 1331 Introduction to Visual Basic Programming
ITSE 2313 Web Authoring
Elective*

1 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
2 Tech Prep course which may have been completed in high school
3 May substitute SPCH 1315 or 1321
4 May substitute PHED 1338
5 May Substitute PSYC 2302
6 May substitute ECON 2301
* Electives (6 credit hours): Any COSC, GRPH, IMED, ITSE, or ITSW course not listed above

CERTIFICATES

Some of the courses in these certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

Microcomputer Applications Certificate

30 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
IMED 1301 Introduction to Multimedia[1]
IMED 1316 Web Page Design I
ITSC 1321 PC Operating Systems – Windows
ITSW 1304 Introduction to Spreadsheets–Excel

Second Semester

IMED 1341 2-D Interface Design-Web Graphics
ITSE 1331 Introduction to Visual Basic Programming
ITSE 2313 Web Authoring
ITSW 1307 Introduction to Database

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Summer

ITSC 2380 Cooperative Education-Computer and Information Sciences, General (Capstone)

[1] Tech Prep course which may have been completed in high school

COMPUTER NETWORKING TECHNOLOGY

Also a Tech Prep Program

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

The Computer Networking Technology program prepares students to perform tasks in network technology relating to network management, system administration, technical support, hardware/software installation, and equipment repair. The program graduate will be able to assemble computers based on customer requirements, install all network wiring and interfaces at customer sites, install and debug network software, monitor and maintain system security, and maintain network hardware and software. The graduate also will be qualified to take Cisco/Microsoft certification examinations upon completion of the AAS program. Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

Career Opportunities

Computer Networking Technology is a fast-growing and high-demand field and includes career opportunities in the following areas:

- Equipment Repair
- Hardware/Software Installation
- Network Management
- Technical Support

AAS - Computer Networking Technology

69 credit hours

FIRST YEAR

First Semester

CPMT 1411 Introduction to Computer Maintenance[1]
ENGL 1301 Composition/Rhetoric I
ITMC 1301 Microsoft Windows Network and Operating System Essentials
ITMC 1441 Implementing Microsoft Windows Professional and Server
MATH 1314 College Algebra

Second Semester

ECON 2301 Principles of Macroeconomics[2]
ITCC 1302 Local Area Networks Design and Protocols: Cisco 1[1]
ITMC 1442 Implementing a Microsoft Windows Network Infrastructure
ITNW 2373 Linux Operating system
SPCH 1311 Fundamentals of Speech Communication[3]

Summer

PHED/DANC Any activity course[4]
PSYC 2301 General Psychology[5]

SECOND YEAR

First Semester

HUMA 1301 Introduction to the Humanities[6]
ITCC 1306 Basic Router Configuration: Cisco 2[1]
ITMC 1443 Implementing and Administering Microsoft Directory Services
ITMC 1475 Managing a Microsoft Windows Network Environment
Microsoft Elective*

Second Semester

ITNW 2417 Network Security (Capstone)
Microsoft Elective*
Elective**
Elective**

[1] Tech Prep course which may have been completed in high school
[2] May substitute ECON 1301 or 2302
[3] May substitute SPCH 1315 or 1321
[4] May substitute PHED 1338
[5] May substitute PSYC 2302
[6] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
* Microsoft Electives (8 credit hours): ITMC 2403, 2404, 2431, 2432, or 2433
** Electives (6 credit hours): CETT 1421, EECT 2433, INTC 1307, ITCC 1342 or 1346, ITMC 1371, 2403, 2404, 2431, 2432 or 2433, ITNW 1380, 1392, 2305, 2373 or 2374, LOTT 1401 or 2440

Cisco Systems Networking Specialization

69 credit hours

FIRST YEAR

First Semester

CPMT 1411 Introduction to Computer Maintenance[1]
ENGL 1301 Composition/Rhetoric I
ITCC 1302 Local Area Networks Design and Protocols: Cisco 1[1]
ITCC 1306 Basic Router Configuration: Cisco 2[1]
ITMC 1301 Microsoft Windows Network and Operating System Essentials

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Second Semester

ITCC 1342 Local Area Network Management: Cisco 3
ITCC 1346 Wide Area Network Management: Cisco 4
ITMC 1441 Implementing Microsoft Windows Professional and Server
MATH 1314 College Algebra
SPCH 1311 Fundamentals of Speech Communication[2]

Summer

PHED/DANC Any activity course[3]
PSYC 2301 General Psychology[4]

SECOND YEAR

First Semester

ECON 2301 Principles of Macroeconomics[5]
HUMA 1301 Introduction to the Humanities[6]
ITCC 2432 Advanced Routing Configuration: Cisco 5
ITCC 2436 Remote Access Networks: Cisco 6
ITMC 1475 Managing a Microsoft Windows Network Environment

Second Semester

ITCC 2440 Configuring LAN Switches: Cisco 7
ITCC 2444 Internetwork Troubleshooting: Cisco 8 (Capstone)
ITNW 2417 Network Security
Elective*

[1] Tech Prep course which may have been completed in high school
[2] May substitute SPCH 1315 or 1321
[3] May substitute PHED 1338
[4] May substitute PSYC 2302
[5] May substitute ECON 1301 or 2302
[6] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
* Electives (3 credit hours): CETT 1421, EECT 2433, INTC 1307, ITCC 1342, 1346, ITMC 1371, 1442, 1443, 2403, 2404, 2431, 2432, or 2433, ITNW 1380, 2305, 2373, or 2374

CERTIFICATES

Computer Networking Technology Software (MCSA) Certificate

18 credit hours

FIRST YEAR

First Semester

ITMC 1301 Microsoft Windows Network and Operating System Essentials
ITMC 1441 Implementing Microsoft Windows Professional and Server

Second Semester

ITMC 1442 Implementing a Microsoft Windows Network Infrastructure
ITMC 1475 Managing a Microsoft Windows Network Environment (Capstone)
Elective*

* Electives (3 credit hours): ITMC 1371, 1443, 2403, 2404, 2431, 2432, or 2433

Computer Networking Technology Advanced Software (MCSE) Specialization

31 credit hours

First Semester

ITMC 1301 Microsoft Windows Network and Operating System Essentials
ITMC 1441 Implementing Microsoft Windows Professional and Server
ITMC 1442 Implementing a Microsoft Windows Network Infrastructure
ITMC 1443 Implementing and Administering Microsoft Directory Services

Second Semester

ITMC 1475 Managing a Microsoft Windows Network Environment
ITNW 2417 Network Security (Capstone)
Microsoft Elective*
Microsoft Elective**

* Microsoft Electives (4 credit hours): ITMC 2403, 2404, 2431, 2432, or 2433
** Advanced Microsoft Electives (4 credit hours): ITMC 2431, 2432, or 2433

Cisco Systems Networking (CCNA) Certificate

15 credit hours

First Semester

ITCC 1302 Local Area Networks Design and Protocols: Cisco 1[1]
ITCC 1306 Basic Router Configuration: Cisco 2[1]
ITCC 1342 Local Area Management (LAN): Cisco [3]

Second Semester

ITCC 1346 Wide Area Management (WAN): Cisco [4] (Capstone)
Elective*

[1] Tech Prep course which may have been completed in high school
* Open Elective (3 credit hours)

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Advanced Cisco Systems Networking (CCNP) Specialization

28 credit hours

First Semester

ITCC 1302 Local Area Networks Design and Protocols: Cisco 1[1]
ITCC 1306 Basic Router Configuration: Cisco 2[1]
ITCC 1342 Local Area Management (LAN): Cisco 3
ITCC 1346 Wide Area Management (WAN): Cisco 4

Second Semester

ITCC 2432 Advanced Routing Configuration: Cisco 5
ITCC 2436 Remote Access Networks: Cisco 6
ITCC 2440 Configuring LAN Switches: Cisco 7
ITCC 2444 Internetwork Troubleshooting: Cisco 8 (Capstone)

[1] Tech Prep course which may have been completed in high school

COMPUTER PROGRAMMING

Program Coordinator

Bill Blitt . . . . . .SCC-J115 . . . . . .972.881.5184

Academic Advisor

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

Many career opportunities are available in computer-related industries. Computer scientists and/or computer software engineers occupy a large percentage of all technical and managerial positions within the industry. The Computer Programming program prepares students with the marketable skills and technical competencies to enter this career field.

This degree program offers specializations in software development and database programming. Areas of study include C++, Java, Visual Basic, and database languages.

Several certificates are offered which can be applied toward the AAS degree. The certificates provide the knowledge to update current job requirements. After successfully completing one or more certificates, students can continue at CCCCD and receive an AAS degree in Computer Programming.

Students planning to transfer to another college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Computer Programming prepares students for many new job opportunities, such as the following:

- Applications Analyst
- Applications Programmer
- Business Analyst
- Business Programmer
- Customer Service Representative
- Database Administrator
- Database Programmer
- Production Analyst
- Software Developer

AAS - Software Development

71 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
COSC 1420 Introduction to Programming – C++[1]
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[2]
MATH 1314 College Algebra

Second Semester

COSC 2325 Assembly Language
COSC 2420 Introduction to Object-Oriented Programming – C++[3]
ITSW 1307 Introduction to Database – Access
MATH 2412 Pre-Calculus for Mathematics and Science
SPCH 1311 Fundamentals of Speech Communication[4]

Summer

COSC 2315 Object-Oriented Data Structures – C++
PSYC 2301 General Psychology[5]

SECOND YEAR

First Semester

ENGL 2311 Technical Writing
ITSC 1327 Multi-User Operating Systems
ITSE 2301 Windows Programming Using C++
ITSE 2374 Computer Programming – C#
PHED/DANC Any Activity Course[6]
Elective*

Second Semester

COSC 1437 Object-Oriented Programming – Java
ECON 1301 Introduction to Economics[7]
INEW 2340 Object-Oriented Design
ITSE 2380 Cooperative Education - Computer Programming (Capstone)[8]
Elective*

[1] May substitute COSC 1320
[2] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[3] May substitute COSC 2320
[4] May substitute SPCH 1315 or 1321
[5] May substitute PSYC 2302
[6] May substitute PHED 1338
[7] May substitute ECON 2301 or 2302
[8] May substitute INEW 2330
* Electives (6 credit hours): BCIS 1332 or 2390, INEW 2301, ITSC 1307, ITSE 1344, 2309, 2339, 2347, 2349, or 2373

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Java Specialization

71 Credit Hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
COSC 1420 Introduction to Programming – C++[1]
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[2]
MATH 1314 College Algebra

Second Semester

COSC 1437 Object-Oriented Programming – Java
COSC 2325 Assembly Language
ITSW 1307 Introduction to Database – Access
MATH 2412 Pre-Calculus for Mathematics and Science
SPCH 1311 Fundamentals of Speech Communication[3]

Summer

ITSE 2309 Database Programming – SQL
PSYC 2301 General Psychology[4]

SECOND YEAR

First Semester

COSC 2436 Object-Oriented Data Structures – Java
ENGL 2311 Technical Writing
ITSC 1327 Multi-User Operating Systems
ITSE 2374 Computer Programming – C#
PHED/DANC Any Activity Course[5]
Elective*

Second Semester

ECON 1301 Introduction to Economics[6]
INEW 2338 Advanced Java Programming
INEW 2340 Object-Oriented Design
ITSE 2380 Cooperative Education, Computer Programming (Capstone)[7]
Elective*

[1] May substitute COSC 1320
[2] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[3] May substitute SPCH 1315 or 1321
[4] May substitute PSYC 2302
[5] May substitute PHED 1338
[6] May substitute ECON 2301 or 2302
[7] May substitute INEW 2330
* Electives (6 credit hours): BCIS 1332 or 2390, COSC 2420, INEW 2301, ITSC 1307, ITSE 1344, 2309, 2339, 2347, 2349, or 2373

CERTIFICATES

Some of the courses in these certificate programs may require prerequisites. Please check the course descriptions in the back of this catalog.

Software Development Certificate

27 credit hours

Summer

COSC 1320 C++ For Programmers[1]

First Semester

COSC 2320 Object-Oriented Programming – C++[2]
COSC 2325 Assembly Language
Elective *

Second Semester

COSC 2315 Object-Oriented Data Structures – C++
ITSE 2301 Windows Programming Using C++
INEW 2340 Object-Oriented Design
Elective *

Summer

ITSE 2380 Cooperative Education - Computer Programming (Capstone)[3]

[1] May substitute COSC 1420
[2] May substitute COSC 2420
[3] May substitute INEW 2330
* Electives (6 credit hours): BCIS 2390, COSC 1437, ITSC 1327, ITSE 1344, 2309, 2339, 2349, or 2373

Java Specialization

33 credit hours

Summer

COSC 1420 Introduction to Programming – C++[1]
ITSW 1307 Introduction to Database – Access

First Semester

COSC 1437 Object-Oriented Programming – Java
ITSE 2309 Database Programming – SQL
Elective *

Second Semester

COSC 2436 Object-Oriented Data Structures – Java
INEW 2340 Object-Oriented Design
Elective *

Summer

INEW 2338 Advanced Java Programming
ITSE 2380 Cooperative Education – Computer Programming (Capstone)[2]

[1] May substitute COSC 1320
[2] May substitute INEW 2330
* Electives (6 credit hours): BCIS 2390, COSC 2325 or 2420, INEW 2301, ITSC 1307, ITSE 1344, 2347, or 2349

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Visual Basic Specialization

27 credit hours

Summer

ITSE 1331 Introduction to Visual Basic Programming

First Semester

ITSE 1344 Mastering Microsoft Visual Basic Development [.NET]

ITSW 1307 Introduction to Database-Access

Elective *

Second Semester

INEW 2301 Macro for Applications – VBA

ITSE 2309 Database Programming – SQL

ITSE 2349 Advanced Visual Basic Programming

Elective *

Summer

ITSE 2380 Cooperative Education – Computer Programming (Capstone)[1]

[1] May substitute INEW 2330

* Electives (6 credit hours): BCIS 2390, COSC 1420 or 2420, INEW 2340, ITSC 1327, ITSE 2347

Database Programming Certificate

27 credit hours

Summer

ITSE 1331 Introduction to Visual Basic Programming

ITSW 1307 Introduction to Database – Access

First Semester

ITSE 1344 Mastering Microsoft Visual Basic Development [.NET]

ITSE 2309 Database Programming – SQL

Elective *

Second Semester

ITSE 2347 Advanced Database Programming – SQL

ITSE 2349 Advanced Visual Basic Programming

Elective *

Summer

ITSE 2380 Cooperative Education – Computer Programming (Capstone)[1]

[1] May substitute INEW 2330

* Electives (6 credit hours): COSC 1437, ITNW 2373, ITSC 1307, ITSE 2333, 2344, or 2354

C++ Specialization

27 credit hours

Summer

COSC 2320 Object-Oriented Programming – C++[1]

ITSW 1307 Introduction to Database – Access

First Semester

ITSE 2301 Windows Programming Using C++

ITSE 2309 Database Programming – SQL

Elective*

Second Semester

ITSE 2347 Advanced Database Programming – SQL

ITSE 2373 Database Programming with Visual C++ and SQL

Elective*

Summer

ITSE 2380 Cooperative Education – Computer Programming (Capstone)[2]

[1] May substitute COSC 2420

[2] May substitute INEW 2330

* Electives (6 credit hours): COSC 1437, ITNW 2373, ITSC 1307, ITSE 2333, 2344, or 2354

DENTAL HYGIENE

Program Director:

Joanne Fletcher . . . . . .CPC-A121 . . . . . .972.548.6535

Academic Advisor:

Lynne Meyer . . . . . .SCC-G107 . . . . . .972.881.5114

The Dental Hygiene program is designed to prepare individuals to become licensed health care professionals who specialize in non-surgical periodontal therapy and oral health education. A broad-based education in biological sciences, humanities, dental sciences, and clinical technologies prepares the graduate for work, under the supervision of a dentist, in private practice and community settings as a member of the dental health team.

Dental Hygiene is a two-year program that begins during the fall semester each year. Classes are scheduled at the Central Park Campus in McKinney. Enrollment is limited and admission to the program is competitive. Clinical students are required to submit a physical, dental, and visual acuity report on an annual basis.

The student is awarded an AAS degree upon successful completion of the program. The graduate is eligible for national and regional examinations.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Accreditation

CCCCD's Dental Hygiene program is accredited by the American Dental Association's Council on Dental Accreditation and has been granted the accreditation status of approval without reporting requirements. The Council is a specialized accrediting body recognized by the Department of Education.

Special Admission Requirements

- Provide proof of high school graduation or GED
- Earn a GPA of 2.5 or greater on all courses applicable to the Dental Hygiene program
- Submit official copies of all college transcripts
- Complete pre-entrance course requirements with a minimum GPA of 2.5
- Complete the PSB exam with a satisfactory result
- Submit a handwritten, one- to two-page essay that discusses why dental hygiene has been selected as a profession
- Submit two reference forms: one from an employer and one from an educator

Admission to this program is selective. Admission to the college does not guarantee admission to the Dental Hygiene program. Registration is by permission only. Information and applications may be obtained from the program director or the Social Sciences, Health, and Public Services Office.

AAS Dental Hygienist

72 credit hours

Pre-Entrance Requirements

BIOL 2401 Anatomy and Physiology I
BIOL 2402 Anatomy and Physiology II
CHEM 1405 Introduction to Chemistry I[1]

FIRST YEAR

First Semester

BIOL 2420 Microbiology
DHYG 1301 Orofacial Anatomy, Histology and Embryology
DHYG 1331 Preclinical Dental Hygiene
ENGL 1301 Composition/Rhetoric I

Second Semester

DHYG 1207 General and Dental Nutrition
DHYG 1227 Preventive Dental Hygiene Care
DHYG 1235 Pharmacology for the Dental Hygienist
DHYG 1261 Clinical I - Dental Hygienist
DHYG 1304 Dental Radiology
DHYG 1319 Dental Materials
PSYC 2301 General Psychology

SECOND YEAR

First Semester

DHYG 1123 Dental Hygiene Practice
DHYG 1215 Community Dentistry
DHYG 1311 Periodontology
DHYG 1339 General and Oral Pathology
DHYG 2201 Contemporary Dental Hygiene Care I
DHYG 2361 Clinical II - Dental Hygienist

Second Semester

DHYG 1275 Community Dental Health Applications
DHYG 1375 Strategies of Oral Medicine (Capstone)
DHYG 2231 Contemporary Dental Hygienist Care II
DHYG 2363 Clinical III - Dental Hygienist
HUMA 1301 Introduction to the Humanities[2]
SOCI 1301 Introduction to Sociology

[1] May substitute CHEM 1411

[2] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course

DIETARY MANAGEMENT

See **Dietary Manager Specialization** under Hotel/Restaurant Management, page 100.

E-BUSINESS MEDIA

Also a Tech Prep Program

Program Coordinator:

Mary Emerson . . . . . .PRC-H111 . . . . . .972.377.1687

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

With the global impact of the web, interactive multimedia technology professionals are in demand. The E-Business Media program prepares students for this role, teaching them to create dynamic web sites for distribution of information, web-based tutorials, business presence, and e-commerce.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

Career Opportunities

An E-Business Media associate degree or certificate provides a variety of career opportunities, including:

- E-Commerce Site Manager/Developer/Database Support
- Interactive Multimedia Programmer/Author
- Multimedia Developer/Generalist
- Web Content Developer/Programmer/ Designer/Server Administrator

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

AAS – E-Business Media

67 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
GRPH 1359 Object-Oriented Computer Graphics
HUMA 1301 Introduction to the Humanities[1]
IMED 1301 Introduction to Multimedia[2]

Second Semester

ECON 2301 Principles of Macroeconomics[3]
GRPH 1325 Digital Imaging I
IMED 1316 Web Page Design I
PHED/DANC Any Activity Course[4]
SPCH 1311 Fundamentals of Speech Communication[5]
Elective*

Summer

PSYC 2301 General Psychology[6]
Elective*

SECOND YEAR

First Semester

ENGL 2311 Technical Writing
IMED 1341 2-D Interface Design – Web Graphics
IMED 2313 Project Analysis and Design
IMED 2315 Web Page Design II
ITSE 2313 Web Authoring

Second Semester

IMED 1345 Interactive Multimedia I
IMED 2309 Internet Commerce
ITSC 1380 Cooperative Education, Computer and Information Sciences, General (Capstone)
MATH Any 1XXX or 2XXX College-Level Mathematics Course[7]
Elective*

1 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
2 Tech Prep course which may have been completed in high school
3 May substitute ECON 2302
4 May substitute PHED 1338
5 May substitute SPCH 1315 or 1321
6 May substitute PSYC 2302
7 With the exception of MATH 1370
* Electives (9 credit hours): Any COSC, GRPH, IMED, ITSE, or ITSW course not listed above

Web Developer Specialization

67 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[1]
IMED 1301 Introduction to Multimedia[2]
IMED 1316 Web Page Design I
PHED/DANC Any Activity Course[3]

Second Semester

GRPH 1359 Object-Oriented Computer Graphics
IMED 2313 Project Analysis and Design
IMED 2315 Web Page Design II
ITSE 2313 Web Authoring
MATH Any 1XXX or 2XXX College-Level Mathematics Course[4]

Summer

ECON 2301 Principles of Macroeconomics[5]
SPCH 1311 Fundamentals of Speech Communication[6]

SECOND YEAR

First Semester

GRPH 1325 Digital Imaging I
IMED 1341 2-D Interface Design – Web Graphics
ITSE 1311 Web Page Programming
ITSW 1307 Introduction to Database – Access

Second Semester

IMED 1345 Interactive Multimedia I
IMED 2309 Internet Commerce
IMED 2349 Internet Communications
PSYC 2301 General Psychology[7]

Summer

ITSE 2302 Intermediate Web Programming (Capstone)
Elective *

1 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
2 Tech Prep course which may have been completed in high school
3 May substitute PHED 1338
4 With the exception of MATH 1370
5 May substitute ECON 2302
6 May substitute SPCH 1315 or 1321
7 May substitute PSYC 2302
* Elective (3 credit hours): Any COSC,GRPH, IMED, ITSE, or ITSW course not listed above

NOTE: The second digit in a course number indicates the number of credit hours for that course.

CERTIFICATES

E-Business Media Certificate

27 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
IMED 1301 Introduction to Multimedia[1]
IMED 1316 Web Page Design I
IMED 2313 Project Analysis and Design

Second Semester

GRPH 1325 Digital Imaging I
IMED 1341 2-D Interface Design – Web Graphics
IMED 2309 Internet Commerce
ITSC 1380 Cooperative Education – Computer and Information Sciences, General (Capstone)
ITSE 2313 Web Authoring

[1] Tech Prep course which may have been completed in high school

Web Developer Specialization

42 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
IMED 1301 Introduction to Multimedia[1]
IMED 1316 Web Page Design I
IMED 2313 Project Analysis and Design

Second Semester

GRPH 1325 Digital Imaging I
GRPH 1359 Object-Oriented Computer Graphics
ITSE 2313 Web Authoring
ITSW 1307 Introduction to Database – Access

SECOND YEAR

First Semester

IMED 1341 2-D Interface Design – Web Graphics
IMED 2309 Internet Commerce
IMED 2315 Web Page Design II
ITSE 1311 Web Page Programming

Second Semester

IMED 1345 Interactive Multimedia I
ITSE 2302 Intermediate Web Programming (Capstone)

[1] Tech Prep course which may have been completed in high school

E-Commerce Certificate

33 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
GRPH 1325 Digital Imaging I
IMED 1301 Introduction to Multimedia[1]
IMED 1316 Web Page Design I
IMED 2309 Internet Commerce

Second Semester

IMED 1341 2-D Interface Design – Web Graphics
IMED 2313 Project Analysis and Design
ITSE 1311 Web Page Programming
ITSE 2302 Intermediate Web Programming (Capstone)
ITSE 2313 Web Authoring
ITSW 1307 Introduction to Database – Access

[1] Tech Prep course which may have been completed in high school

ELECTRONIC ENGINEERING TECHNOLOGY

Also a Tech Prep Program

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

Students in the Electronic Engineering Technology degree program will receive training in several diversified areas of electronics. This program emphasizes the application of mathematical theorems and applied physics toward the design and analysis of electronic circuits. Students will be exposed to a combination of classroom theory and hands-on laboratory design and analysis experiments.

Program curriculum and laboratory equipment have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry.

Through articulation agreements, students can transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Students completing the Electronic Engineering Technology degree program will receive quality training for the following fields:

- Advanced Manufacturing Equipment Applications

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

- Avionics and Space Communications
- Biomedical Applications and Design
- Computer Systems Applications
- Laser and Fiber Optics Applications
- Printed Circuit Board Design and Manufacturing
- Semiconductor Wafer Fabrication
- Telecommunications

AAS – Electronic Engineering Technology

67 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits[1]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra
PHYS 1401 General Physics I

Second Semester

CETT 1405 AC Circuits[1]
CETT 1425 Digital Fundamentals[1]
DFTG 1309 Basic Computer-Aided Drafting[2]
MATH 1316 Trigonometry

Summer

SPCH 1311 Fundamentals of Speech Communication[3]
Elective*

SECOND YEAR

First Semester

CETT 1445 Microprocessor
CETT 1457 Linear Integrated Circuits
HUMA 1301 Introduction to the Humanities[4]
PHED/DANC Any activity course[5]
PHYS 1402 General Physics II

Second Semester

ECON 1301 Introduction to Economics[6]
EECT 2433 Telephone Systems
MATH 2413 Calculus I
PSYC 2302 Applied Psychology[7]
Elective*
Capstone: Comprehensive examination

1 Tech Prep course which may have been completed in high school
2 May be substituted for COSC 1300
3 May substitute SPCH 1315 or 1321
4 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
5 May substitute PHED 1338
6 May substitute ECON 2301 or 2302
7 May substitute PSYC 2301

* Electives (6 credit hours): CETT 1409, CPMT 1411 or 2337, EECT 1391 or 1491, ENTC 1380 or 2380, INTC 1305, or LOTT 2440

Electro-Optical Specialization

68 Credit Hours

Skilled optical technicians are in high demand in our area. Recent survey data indicates that within the next decade high tech industries will experience a nationwide shortage of 52,264 photonics technicians. Students enrolled in the Electro-Optical Engineering Technology program have the opportunity to engage in optical projects in the new state-of-the-art Convergence Lab located at CCCCD. Both an Associate of Applied Science Degree and Certificate are available to prospective students. Through articulation agreements students may transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with a CCCCD academic advisor prior to beginning this program to verify course transferability.

FIRST YEAR

First Semester

CETT 1403 DC Circuits[1]
ECON 1301 Introduction to Economics[2]
ENGL 1301 Composition/Rhetoric I
LOTT 1443 Geometrical Optics I
MATH 1314 College Algebra

Second Semester

CETT 1405 AC Circuits[1]
DFTG 1309 Basic Computer-Aided Drafting [1, 3]
LOTT 1401 Introduction to Fiber Optics
MATH 1316 Trigonometry
PHYS 1401 General Physics I

Summer

PHED/DANC Any Activity Course[4]
SPCH 1311 Fundamentals of Speech Communication[5]

SECOND YEAR

First Semester

ENGL 2311 Technical Writing
LOTT 2436 Wave Optics
LOTT 1444 Fundamentals of Laser and Laser Safety
PHYS 1402 General Physics II

Second Semester

CETT 1457 Linear Integrated Circuits
HUMA 1301 Introduction to the Humanities[6]
LOTT 2449 Photonics (Capstone)
PSYC 2302 Applied Psychology[7]

NOTE: The second digit in a course number indicates the number of credit hours for that course.

[1] Tech Prep courses which may have been completed in high school
[2] May substitute ECON 2301 or 2302
[3] May be substituted for COSC 1300
[4] May substitute PHED 1338
[5] May substitute SPCH 1315 or 1321
[6] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[7] May substitute PSYC 2301

Electronic Engineering Technology Certificate

30 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits[1]
MATH 1316 Trigonometry

Second Semester

CETT 1405 AC Circuits[1]
MATH 2413 Calculus I

SECOND YEAR

First Semester

CETT 1425 Digital Fundamentals[1]
CETT 1457 Linear Integrated Circuits

Second Semester

CETT 1445 Microprocessor
CPMT 2337 Microcomputer Interfacing
Capstone: Comprehensive examination

[1] Tech Prep course which may have been completed in high school

Electro-Optical Specialization

32 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits[1]
LOTT 1443 Geometrical Optics I

Second Semester

LOTT 1401 Introduction to Fiber Optics
LOTT 1444 Fundamentals of Laser and Laser Safety

SECOND YEAR

First Semester

CETT 1405 AC Circuits[1]
CETT 1429 Solid State Devices[1]

Second Semester

LOTT 2436 Wave Optics
LOTT 2449 Photonics (Capstone)

[1] Tech Prep course which may have been completed in high school

ELECTRONIC TECHNOLOGY

Also a Tech Prep Program

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

Trained electronic technicians are in high demand in our area. Industry at present has a shortage of over 3,000 technicians and forecasts this to increase over the next decade. Students in the Electronic Technology program can pursue training in one of three specialized areas: computer maintenance, general electronics, or instrumentation.

Program curriculum and laboratory equipment have been formally evaluated and endorsed by an advisory committee consisting of members of the electronics industry.

Through articulation agreements, students can transfer their completed program toward a bachelor's degree into several colleges and universities. Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Students completing the Electronic Technology degree program will receive quality training for the following fields:

- Advanced Manufacturing Equipment Applications
- Avionics and Space Communications
- Biomedical Applications and Design
- Computer Systems Applications
- Laser and Fiber Optics Applications
- Printed Circuit Board Design and Manufacturing
- Semiconductor Wafer Fabrication
- Telecommunications

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

AAS – Electronic Technology

68 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits[1]
DFTG 1309 Basic Computer-Aided Drafting[2]
ECON 1301 Introduction to Economics[3]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra

Second Semester

CETT 1405 AC Circuits[1]
CETT 1421 Electronic Fabrication
DFTG 1358 Electrical/Electronics Drafting
HUMA 1301 Introduction to the Humanities[4]
MATH 1316 Trigonometry

Summer

CETT 1429 Solid State Devices[1]
ENGL 2311 Technical Writing

SECOND YEAR

First Semester

CETT 1325 Digital Fundamentals[1]
CETT 1457 Linear Integrated Circuits
CSIR 1444 General Communication Circuits I
PHED/DANC Any activity course[5]
SPCH 1311 Fundamentals of Speech Communication[6]

Second Semester

ELMT 2437 Electronic Troubleshooting, Service, and Repair
PSYC 2302 Applied Psychology[7]
Elective*
Elective*

Capstone: Comprehensive examination

1 Tech Prep course which may have been completed in high school
2 May be substituted for COSC 1300
3 May substitute ECON 2301 or 2302
4 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
5 May substitute PHED 1338
6 May substitute SPCH 1315 or 1321
7 May substitute PSYC 2301
* Electives (6 credit hours): Any CETT, CPMT, EECT, or LOTT courses not listed above

Computer Maintenance Electronic Specialization

72 credit hours

FIRST YEAR

First Semester

CETT 1425 Digital Fundamentals[1]
DFTG 1309 Basic Computer-Aided Drafting[1, 2]
ECON 1301 Introduction to Economics[3]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra

Second Semester

CETT 1421 Electronic Fabrication
CETT 1431 Technical Programming
DFTG 1358 Electrical/Electronics Drafting
HUMA 1301 Introduction to the Humanities[4]
MATH 1316 Trigonometry

Summer

CETT 1457 Linear Integrated Circuits
ENGL 2311 Technical Writing

SECOND YEAR

First Semester

CETT 1445 Microprocessor
CPMT 1411 Introduction to Computer Maintenance[1]
CPMT 1443 Microcomputer Architecture
SPCH 1311 Fundamentals of Speech Communication[5]

Second Semester

CPMT 1445 Computer Systems Maintenance
CPMT 2337 Microcomputer Interfacing
PHED/DANC Any activity course[6]
PSYC 2302 Applied Psychology[7]
Elective*
Elective*

Capstone: Comprehensive examination

1 Tech Prep course which may have been completed in high school
2 May be substituted for COSC 1300
3 May substitute ECON 2301 or 2302
4 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
5 May substitute SPCH 1315 or 1321
6 May substitute PHED 1338
7 May substitute PSYC 2301
* Electives (6 credit hours): Any CETT, CPMT, EECT, or LOTT course not listed above

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Instrumentation Electronic Specialization

70 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits[1]
DFTG 1309 Basic Computer-Aided Drafting[1, 2]
ECON 1301 Introduction to Economics[3]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra

Second Semester

CETT 1325 Digital Fundamentals[1]
CETT 1405 AC Circuits[1]
DFTG 1358 Electrical/Electronics Drafting
HUMA 1301 Introduction to the Humanities[4]
MATH 1316 Trigonometry

Summer

CETT 1429 Solid State Devices[1]
ENGL 2311 Technical Writing

SECOND YEAR

First Semester

CETT 2333 Digital Computer Circuits
ELMT 1301 Basic Programmable Logic Controllers
ELMT 2437 Electronic Troubleshooting, Service, and Repair
INMT 1447 Industrial Automation
SPCH 1311 Fundamentals of Speech Communication[5]

Second Semester

CETT 1457 Linear Integrated Circuits
PHED/DANC Any activity course[6]
PSYC 2302 Applied Psychology[7]
Elective*
Elective*

Capstone: Comprehensive examination

1 Tech Prep course which may have been completed in high school
2 May be substituted for COSC 1300
3 May substitute ECON 2301 or 2302
4 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
5 May substitute SPCH 1315 or 1321
6 May substitute PHED 1338
7 May substitute PSYC 2301
* Electives (6 credit hours): CETT 1441 or 2439, CPMT 1443, ENTC 1380 or 2380, or LOTT 1401

CERTIFICATES

Electronic Technology Certificate

31 credit hours

FIRST YEAR

First Semester

CETT 1325 Digital Fundamentals[1]
CETT 1403 DC Circuits[1]
CETT 1421 Electronic Fabrication
ELMT 2437 Electronic Troubleshooting, Service, and Repair

Second Semester

CETT 1405 AC Circuits[1]
CETT 1429 Solid State Devices[1]
CETT 1457 Linear Integrated Circuits
CSIR 1444 General Communication Circuits I

Capstone: Comprehensive examination

1 Tech Prep course which may have been completed in high school

Computer Maintenance Specialization

35 credit hours

FIRST YEAR

First Semester

CETT 1425 Digital Fundamentals
CETT 1431 Technical Programming
CPMT 1411 Introduction to Computer Maintenance
CPMT 1443 Microcomputer Architecture

Second Semester

CETT 1421 Electronic Fabrication
CETT 1445 Microprocessor[1]
CETT 1457 Linear Integrated Circuits
CPMT 1445 Computer Systems Maintenance
CPMT 2337 Microcomputer Interfacing

Capstone: Comprehensive examination

1 Tech Prep course which may have been completed in high school

Instrumentation Specialization

33 credit hours

FIRST YEAR

First Semester

CETT 1325 Digital Fundamentals[1]
CETT 1403 DC Circuits[1]
CETT 1405 AC Circuits[1]
CETT 2333 Digital Computer Circuits
ELMT 1301 Basic Programmable Logic Controllers

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Second Semester

CETT 1429 Solid State Devices[1]
CETT 1457 Linear Integrated Circuits
ELMT 2437 Electronic Troubleshooting, Service, and Repair
INMT 1447 Industrial Automation
Capstone: Comprehensive examination

[1] Tech Prep course which may have been completed in high school

EMERGENCY MEDICAL SERVICES PROFESSIONS

Program Coordinator:

Robert Sherard . . . . . .CPC-E307 . . . . . .972.548.6848

Academic Advisor:

Jeannie Walls . . . . . .CPC-A108C 972.548.6778

CCCCD's Emergency Medical Services Professions program establishes an excellent foundation for careers in emergency medicine and other related health care fields. Three tracks are available, including:

- **Emergency Medical Technician – Basic** **6 credit hours**
  (Included in the prerequisites for degree and certificate)
- **AAS Emergency Medical Services Professions** **68 credit hours**
- **Emergency Medical Services Professions Certificate** **40 credit hours**

Students planning to transfer to a college or university should check with a CCCCD academic advisor prior to beginning this program to verify course transferability.

Admission Requirements

All students:

- High school diploma or GED
- 18 years of age
- Criminal history check
- Drug screen

American Heart Association CPR for Health Care Provider or Red Cross CPR for the Professional Rescuer. *NOTE: This requirement must be met before enrolling in clinicals and the internship.*

EMT – Basic students:

No additional requirements

AAS – Emergency Medical Services Professions or Emergency Medical Services Professions Certificate (Paramedic Students):

- Texas Department of Health or National Registry EMT-Basic Certification
- Completion of program application (available in Health Science office, CPC-E302)
- PSB examination for Allied Health Professionals (offered at specific times throughout the year)
- Completion of local college assessments in reading, writing, and mathematics (must place at or above college-level in all assessments)

Career Opportunities

- Cardiac Lab Technician
- Emergency Department Assistant
- Patient Care Technician
- Intensive Care Technician
- Firefighter/Paramedic
- Paramedic (non-911)
- Emergency Medical Technician (non-911)

AAS – Emergency Medical Services Professions

68 credit hours

Prerequisites

BIOL 1406 General Biology
EMSP 1160 Clinical – Emergency Medical Technology/Technician - Basic[1]
EMSP 1501 Emergency Medical Technician - Basic[1]
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra[2]

FIRST YEAR

First Semester

BIOL 2401 Human Anatomy and Physiology I
EMSP 1338 Introduction to Advanced Practice
EMSP 1356 Patient Assessment and Airway Management
SPCH 1315 Public Speaking[3]
PHED 1100 Beginning Weight Training

Second Semester

BIOL 2402 Human Anatomy and Physiology II
EMSP 1161 Clinical – Advanced I
EMSP 2434 Medical Emergencies
EMSP 2444 Cardiology

Summer

EMSP 1162 Clinical – Advanced II
EMSP 1355 Trauma Management

SECOND YEAR

First Semester

EMSP 2260 Clinical – Advanced III
EMSP 2330 Special Populations
EMSP 2338 EMS Operations
HUMA 1302 Cultural Diversity[4]
PSYC 2301 General Psychology[5]

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Second Semester

EMSP 2243 Assessment Based Management (Capstone)
EMSP 2563 Clinical – Advanced IV

[1] A student that has the EMT – Basic certification has met this requirement
[2] May substitute a higher level mathematics course
[3] May substitute SPCH 1321
[4] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1301, MUSI 1306 or 1307, or any PHIL course
[5] May substitute SOCI 1301 or PSYC 2302

Emergency Medical Services Professions Certificate

40 credit hours

Prerequisites

EMSP 1160 Clinical – Emergency Medical Technology/Technician – Basic[1]
EMSP 1501 Emergency Medical Technician – Basic[1]

FIRST YEAR

First Semester

EMSP 1338 Introduction to Advanced Practice
EMSP 1356 Patient Assessment and Airway Management

Second Semester

EMSP 1161 Clinical – Advanced I
EMSP 2434 Medical Emergencies
EMSP 2444 Cardiology

Summer

EMSP 1162 Clinical – Advanced II
EMSP 1355 Trauma Management

SECOND YEAR

First Semester

EMSP 2260 Clinical – Advanced III
EMSP 2330 Special Populations
EMSP 2338 EMS Operations

Second Semester

EMSP 2243 Assessment Based Management (Capstone)
EMSP 2563 Clinical – Advanced IV

[1] A student that has the EMT – Basic certification has met this requirement. The student may also choose to complete six credit hours of foreign language to satisfy this requirement

FIRE SCIENCE

Program Director:

Pat McAuliff . . . . . .CPC-A206 . . . . . .972.548.6837

Academic Advisor:

Suzon Schroeder . . . . . .CPC-A108B 972.548.6779
Jeannie Walls . . . . . .CPC-A108C 972.548.6778

The firefighter with a well-balanced educational background will be better prepared to serve and protect the community. CCCCD's Associate of Applied Science degree in Fire Science is designed to give a broad perspective on various facets of providing fire protection. The program is applicable for students wishing to enter the fire service and for persons already employed as firefighters or in related career fields. Students acquire the technical knowledge needed to combat the fire problems created by modern living.

Full-time, full-paid firefighters employed by any political subdivision who are enrolled in fire science courses within CCCCD's Fire Science program are exempt from paying tuition and laboratory fees.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program.

Students interested in enrolling in the Fire Academy should contact the Fire Science Office at 972.548.6836.

Additional information may be obtained from the Director of Fire Science, the Social Sciences, Health, and Public Services Office, or at the Fire Science web site: iws.ccccd.edu/firescience/fire.html.

Additional Admissions Requirements for Firefighter Certification Courses

- Have proof of high school graduation or GED
- Complete CCCCD reading and mathematics assessments
- Complete the physical ability exam and personal interview scheduled through the program coordinator
- Candidates to the Fire Academy must be in good academic standing

Registration is by permission only. Additional information and applications may be obtained from the program director or the Social Sciences, Health, and Public Services Office.

Career Opportunities

Today's fire protection responsibilities provide new and exciting challenges in both the public and private sectors. Students enrolled in the Fire Science program prepare for occupations involving fire suppression, investigation, prevention, and education. These challenging job opportunities include:

- Fire Department Officer
- Fire Equipment Sales and Service Representative
- Firefighter
- Hazardous Material Team Member

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

- Industrial Fire Protection Technician
- Municipal Emergency Administrator
- Safety Technician

AAS – Fire Science

68 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ECON 1301 Introduction to Economics[1]
ENGL 1301 Composition/Rhetoric I
FIRT 1301 Fundamentals of Fire Protection
MATH 1332 Contemporary Mathematics[2]
PHED 1100 Beginning Weight Training[3]

Second Semester

CHEM 1405 Introduction to Chemistry I
FIRT 1315 Hazardous Materials I
GOVT 2301 American Government I
HUMA 1301 Introduction to the Humanities[4]
SPCH 1311 Fundamentals of Speech Communication[5]

SECOND YEAR

First Semester

ENGL 2311 Technical Writing
FIRT 1329 Building Codes and Construction
FIRT 1338 Fire Protection Systems
PSYC 2302 Applied Psychology[6]
Elective*

Second Semester

FIRT 1307 Fire Prevention Codes and Inspections
FIRT 1309 Fire Administration I
FIRT 1345 Hazardous Materials II
FIRT 1303 Fire and Arson Investigation I
FIRT 1305 Public Education Programs
FIRT 1347 Industrial Fire Protection
FIRT 1349 Fire Administration II (Capstone)

1 May substitute ECON 2301 or 2302
2 May substitute MATH 1324 or 1314 (recommended for transfer students)
3 May substitute PHED 1338
4 May substitute ARTS 1301, DRAM 1310, MUSI 1306 or 1307, or any PHIL course
5 May substitute SPCH 1315 or 1321
6 May substitute PSYC 2301
* Open Elective

Fire Officer Certification Specialization

68 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ECON 1301 Introduction to Economics[1]
ENGL 1301 Composition/Rhetoric I
FIRT 1301 Fundamentals of Fire Protection
MATH 1332 Contemporary Mathematics[2]
PHED 1100 Beginning Weight Training[3]

Second Semester

CHEM 1405 Introduction to Chemistry I
FIRT 1315 Hazardous Materials I
GOVT 2301 American Government I
HUMA 1301 Introduction to the Humanities[4]
SPCH 1311 Fundamentals of Speech Communication[5]

SECOND YEAR

First Semester

ENGL 2311 Technical Writing
FIRT 1329 Building Codes and Construction
FIRT 1338 Fire Protection Systems
PSYC 2302 Applied Psychology[6]
Elective*

Second Semester

FIRT 1307 Fire Prevention Codes and Inspections
FIRT 1303 Fire and Arson Investigation I
FIRT 1309 Fire Administration I
FIRT 1349 Fire Administration II
FIRT 1355 Methods of Teaching
FIRT 1331 Firefighting Strategies and Tactics I
FIRT 2351 Company Fire Officer (Capstone)

1 May substitute ECON 2301 or 2302
2 May substitute MATH 1324 or 1314 (recommended for transfer students)
3 May substitute PHED 1338
4 May substitute ARTS 1301, DRAM 1310, MUSI 1306 or 1307, or any PHIL course
5 May substitute SPCH 1315 or 1321
6 May substitute PSYC 2301
* Open Elective

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Basic Firefighter Certification Specialization

69 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ECON 1301 Introduction to Economics[1]
ENGL 1301 Composition/Rhetoric I
FIRT 1301 Fundamentals of Fire Protection
MATH 1332 Contemporary Mathematics[2]
PHED 1100 Beginning Weight Training[3]

Second Semester

CHEM 1405 Introduction to Chemistry I
FIRT 1315 Hazardous Materials I
GOVT 2301 American Government I
HUMA 1301 Introduction to the Humanities[4]
SPCH 1311 Fundamentals of Speech Communication[5]

SECOND YEAR

First Semester

ENGL 2311 Technical Writing
FIRT 1329 Building Codes and Construction
FIRT 1338 Fire Protection Systems
PSYC 2302 Applied Psychology[6]
Elective*

Second Semester

EMSP 1160 Clinical – Emergency Medical Technology/Technician – Basic
EMSP 1501 Emergency Medical Technician – Basic
FIRS 1201 Firefighter Certification I
FIRS 1207 Firefighter Certification II
FIRS 1313 Firefighter Certification III
FIRS 1219 Firefighter Certification IV
FIRS 1223 Firefighter Certification V
FIRS 1329 Firefighter Certification VI
FIRS 1233 Firefighter Certification VII (Capstone)

[1] May substitute ECON 2301 or 2302
[2] May substitute MATH 1324 or 1314 (recommended for transfer students)
[3] May substitute PHED 1338
[4] May substitute ARTS 1301, DRAM 1310, MUSI 1306 or 1307, or any PHIL course
[5] May substitute SPCH 1315 or 1321
[6] May substitute PSYC 2301
* Open Elective

CERTIFICATES

Basic Firefighter Certificate

22 credit hours

FIRST YEAR

First Semester

EMSP 1160 Clinical - Emergency Medical Technology/Technician - Basic
EMSP 1501 Emergency Medical Technician - Basic
FIRS 1201 Firefighter Certification I
FIRS 1207 Firefighter Certification II
FIRS 1313 Firefighter Certification III

Second Semester

FIRS 1219 Firefighter Certification IV
FIRS 1223 Firefighter Certification V
FIRS 1329 Firefighter Certification VI
FIRS 1233 Firefighter Certification VII (Capstone)

Fire Officer Certificate

21 credit hours

FIRST YEAR

First Semester

FIRT 1303 Fire and Arson Investigation I
FIRT 1307 Fire Prevention Codes and Inspections
FIRT 1309 Fire Administration I

Second Semester

FIRT 1331 Firefighting Strategies and Tactics I
FIRT 1349 Fire Administration II
FIRT 1355 Methods of Teaching

Summer

FIRT 2351 Company Fire Officer (Capstone)

HOTEL/RESTAURANT MANAGEMENT

Also a Tech Prep Program

Program Coordinator:

Karen Musa . . . . . .PRC-F112 . . . . . .972.377.1672

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

Students completing the Hotel/Restaurant Management program at CCCCD will be qualified for a variety of mid-management positions and career advancement in the hospitality industry. Students in this program may choose from three degree options: Hotel/Restaurant Management degree, Culinary Arts specialization, or Dietary Manager specialization.

The Hotel/Restaurant Management curriculum emphasizes problem-solving, creativity, and industry involvement, in addition to practical on-the-job experience. Upon completion of this

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

degree, the student will have achieved almost 1,000 hours of work experience directly related to this chosen field.

Day and night classes are open-entry courses that provide a flexible schedule and meet a variety of individual needs. These classes may also be taken for continuing education credit.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Accreditation and Transfer

CCCCD's Dietary Manager program curriculum has been approved by the Dietary Manager's Association (DMA). Articulation agreements are being developed with nationally recognized hospitality programs such as the University of North Texas, Johnson & Wales University, Texas Tech University, and the University of Houston.

Certifications

Students completing the Dietary Manager specialization will be eligible to take the Dietary Manager Certification exam offered by the Dietary Manager's Association. Students will be classified as a Certified Dietary Manager (CDM) and Certified Food Protection Professional (CFPP) upon successful completion of the certification examination. The Dietary Manager Program curriculum meets the minimum requirements set by the Texas Department of Health for food service directors employed in long-term care facilities.

Additional Admissions Requirements

- Complete program application procedure
- Complete CCCCD's reading, writing, and mathematics assessments

Additional information and applications for the program may be obtained from the program coordinator or the Business and Computer Sciences Office.

Career Opportunities

The Hotel/Restaurant Management degree prepares students for many different job opportunities in a variety of firms including hotels, bed and breakfasts, retirement facilities, restaurants, country clubs, and hospitals. Management and supervisory positions may be found in the following occupational areas:

- Accounting and Finance
- Facilities Management
- Food and Beverage Management
- Human Resources
- Rooms Division
- Sales and Marketing
- Security

AAS – Hotel/Restaurant Management

66 credit hours

FIRST YEAR

First Semester

ENGL 1301	*Composition/Rhetoric I*
HAMG 1321	Introduction to Hospitality Industry[1]
HAMG 1340	Hospitality Legal Issues
HAMG 1380	Cooperative Education – Hospitality Administration and Management
HAMG 2332	Hospitality Financial Management
SPCH 1321	*Business and Professional Speaking*[2]

Second Semester

COSC 1300	*Computer Essentials*
ECON 1301	*Introduction to Economics*[3]
HAMG 1313	Front Office Procedures
HAMG 1324	Hospitality Human Resources Management
HAMG 2307	Hospitality Marketing and Sales
HAMG 2337	Hospitality Facilities Management

Summer

CULA 1301	Basic Food Preparation
HAMG 2301	Principles of Food and Beverage Operations

SECOND YEAR

First Semester

HAMG 1311	Sanitation and Safety[1, 4, 5]
HAMG 2305	Hospitality Management and Leadership
HUMA 1301	*Introduction to the Humanities*[6]
MATH 1332	*Contemporary Mathematics*[7]
PHED/DANC	*Any activity course*[8]
PSYC 2301	*General Psychology*[9]
TRVM 2301	Introduction to Convention/Meeting Management

Second Semester

HAMG 2581	Cooperative Education – Hospitality Administration and Management (Capstone)

1 Tech Prep course which may have been completed in high school
2 May substitute SPCH 1311 or 1315
3 May substitute ECON 2301 or 2302
4 Certification in ServSafe
5 Certification in Food Protection Management
6 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
7 May substitute MATH 1324 or 1314 (recommended for transfer students)
8 May substitute PHED 1338
9 May substitute PSYC 2302

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Culinary Arts Specialization

72 credit hours

FIRST YEAR

First Semester

BIOL 1322 General Nutrition
CULA 1301 Basic Food Preparation
CULA 1380 Cooperative Education – Culinary Arts/Chef Training
ENGL 1301 Composition/Rhetoric I
HAMG 1311 Sanitation and Safety[1, 2, 3]
HAMG 1321 Introduction to Hospitality Industry[1]
HAMG 2332 Hospitality Financial Management
SPCH 1321 Business and Professional Speaking[4]

Second Semester

COSC 1300 Computer Essentials
CULA 1341 American Regional Cuisine
CULA 1345 International Cuisine
CULA 2301 Intermediate Food Preparation
ECON 1301 Introduction to Economics[5]
HAMG 2301 Principles of Food and Beverage Operations
PSTR 1301 Fundamentals of Baking

Summer

MATH 1332 Contemporary Mathematics[6]

SECOND YEAR

First Semester

CULA 2331 Advanced Food Preparation
HAMG 1340 Hospitality Legal Issues
HAMG 2305 Hospitality Management and Leadership
HAMG 2307 Hospitality Marketing and Sales
HUMA 1301 Introduction to the Humanities[7]
PHED/DANC Any activity course[8]
PSYC 2301 General Psychology[9]

Second Semester

CULA 2581 Cooperative Education – Culinary Arts/Chef Training (Capstone)

1 Tech Prep course which may have been completed in high school
2 Certification in ServSafe
3 Certification in Food Protection Management
4 May substitute SPCH 1311 or 1315
5 May substitute ECON 2301 or 2302
6 May substitute MATH 1324 or MATH 1314 (recommended for transfer students)
7 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
8 May substitute PHED 1338
9 May substitute PSYC 2302

CERTIFICATES

Hotel/Restaurant Management Certificate

27 credit hours

FIRST YEAR

First Semester

HAMG 1321 Introduction to Hospitality Industry[1]
HAMG 1340 Hospitality Legal Issues
HAMG 2307 Hospitality Marketing and Sales
HAMG 2332 Hospitality Financial Management

Second Semester

HAMG 1311 Sanitation and Safety[1, 2, 3]
HAMG 2305 Hospitality Management and Leadership
HAMG 2337 Hospitality Facilities Management
RSTO 1380 Cooperative Education – Food and Beverage/Restaurant Operations Manager (Capstone)
HAMG 2301 Principles of Food and Beverage Operations

1 Tech Prep course which may have been completed in high school
2 Certification in ServSafe
3 Certification in Food Protection Management

Culinary Arts Specialization

27 credit hours

FIRST YEAR

First Semester

CULA 1301 Basic Food Preparation
CULA 1341 American Regional Cuisine
CULA 2301 Intermediate Food Preparation
HAMG 1321 Introduction to Hospitality Industry[1]

Second Semester

CULA 1345 International Cuisine
CULA 1380 Cooperative Education – Culinary Arts/Chef Training (Capstone)
CULA 2331 Advanced Food Preparation
HAMG 1311 Sanitation and Safety[1, 2, 3]
HAMG 2301 Principles of Food and Beverage Operations

1 Tech Prep course which may have been completed in high school
2 Certification in ServSafe
3 Certification in Food Protection Management

Dietary Manager Specialization

18 Credit Hours

FIRST YEAR

First Semester

BIOL 1323 Nutrition and Diet Therapy
HAMG 1324 Hospitality Human Resources Management
HAMG 1380 Cooperative Education – Hospitality Administration and Management

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Second Semester

CULA 1380 Cooperative Education – Culinary Arts/Chef Training (Capstone)
HAMG 2301 Principles of Food and Beverage Operations
HAMG 1311 Sanitation and Safety [1, 2, 3]

[1] Tech Prep course which may have been completed in high school
[2] Certification in ServSafe
[3] Certification in Food Protection Management

Hotel Management Specialization

24 credit hours

FIRST YEAR

First Semester

HAMG 1321 Introduction to Hospitality Industry[1]
HAMG 1340 Hospitality Legal Issues
HAMG 2307 Hospitality Marketing and Sales
HAMG 2332 Hospitality Financial Management

Second Semester

HAMG 1313 Front Office Procedures
HAMG 1324 Hospitality Human Resources Management
HAMG 1380 Cooperative Education – Hospitality Administration and Management (Capstone)
HAMG 2337 Hospitality Facilities Management

[1] Tech Prep course which may have been completed in high school

INTERIOR AND ARCHITECTURAL DESIGN

Also a Tech Prep Program

Program Coordinator:

Warner Richeson PRC-H114 972-377-1689

Academic Advisor:

Terrence Brennan PRC-F136 972-377-1778

The Interior and Architectural Design degree program prepares students to enter the world of spatial design. Specialized knowledge needed by an architect or interior designer includes spatial composition, drafting, space planning, building codes, and materials. Electives allow for more in-depth study of architecture, interior design, or illustration. Students are immediately valuable to employers upon graduation with our strong curriculum in CAD drafting. The programs strengths in advanced levels of drafting and modeling means students can position themselves within interior and architectural design firms to further their training and development in their respective fields.

Interior and Architectural Design are state-licensed professions and all state requirements must be met before either title can be used. Accredited degrees in Interior Design and Architecture are available through four local institutions (UNT, UTA, El Centro College, and TCU). Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

With an Associate of Applied Science degree in Interior and Architectural Design, the student will have the skills necessary to enter the profession as an assistant in an interior design firm, an architectural firm, a space planning or facilities management department of any large corporation, or to practice as an interior decorator, a salesperson in a retail home furnishings or home improvement products store, or a wholesale furnishings or fixtures showroom. The graduate will also be prepared for transfer to an accredited professional program in Interior Design or Architecture.

AAS Interior and Architectural Design

70 Credit Hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
DFTG 1309 Basic Computer-Aided Drafting[1]
INDS 1301 Basic Elements of Design
INDS 1319 Technical Drawing for Interior Designers
INDS 1341 Color Theory and Application

Second Semester

DFTG 2319 Intermediate Computer-Aided Drafting[1]
ENGL 1301 Composition/Rhetoric I
INDS 2313 Residential Design I
INDS 2321 Presentation Drawing
SPCH 1311 Fundamentals of Speech Communication[2]

Summer

DFTG 2332 Advanced Computer-Aided Drafting
MATH 1314 College Algebra
HUMA 1301 Introduction to the Humanities[3]
PHED/DANC Any activity course[4]

SECOND YEAR

First Semester

DFTG 1391 Special Topics in Drafting Intermediate Pro/Engineer, 3-D Studio Max, or Microstation
INDS 1351 History of Interiors I
INDS 2335 Residential Design II
PSYC 2302 Applied Psychology[5]
Elective*

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Second Semester

ECON 1301 Introduction to Economics[6]
INDS 1345 Commercial Design I (Capstone)
INDS 1352 History of Interiors II
Elective*
Elective*

[1] Tech Prep course which may have been completed in high school
[2] May substitute SPCH 1315 or 1321
[3] May substitute ARTS 1301, 1303, or 1304, HUMA 1302, or MUSI 1306
[4] May substitute PHED 1338
[5] May substitute PSYC 2301
[6] May substitute ECON 2301 or 2302
* Electives (nine credit hours): DFTG 1317, 1321, 2310, or 2328, INDS 1315, 2307, or 2315

Interior and Architectural Design Certificate

42 Credit Hours

FIRST YEAR

First Semester

DFTG 1309 Basic Computer-Aided Drafting[1]
INDS 1301 Basic Elements of Design
INDS 1319 Technical Drawing for Interior Designers
INDS 1341 Color Theory and Application

Second Semester

DFTG 2319 Intermediate Computer-Aided Drafting[1]
INDS 2313 Residential Design I
INDS 2321 Presentation Drawing

SECOND YEAR

First Semester

INDS 1351 History of Interiors I
INDS 2335 Residential Design II
Elective*

Second Semester

INDS 1345 Commercial Design I (Capstone)
INDS 1352 History of Interiors II
Elective*
Elective*

[1] Tech Prep course which may have been completed in high school
* Electives (three credit hours): DFTG 1317, 1321, 2310, or 2328, INDS 1315, 2307, or 2315

INTERPRETER PREPARATION PROGRAM/DEAF

Also see American Sign Language, page 49.

Program Coordinator:

Henry Whalen .....SCC-B135 .....972.881.5152
(TTY) 972.881.5138

Academic Advisor:

Tori Hoffman .....PRC F142 .....972.377.1779

Because of the passage of the Americans with Disabilities Act, there is currently a national and statewide shortage of interpreters. Moreover, the quality as well as the quantity of the interpreters that the market demands is increasing.

The Interpreter Preparation Program/Deaf (IPPD) provides a focused and balanced education for students who desire to become Sign Language Interpreters. With an emphasis on receptive skills, the program concentrates on synthesizing the study of American Sign Language (ASL), Deaf culture, and interpreting as a profession. Interpreting requires excellence in ASL and a thorough knowledge of oneself and one's ethics because interpreters are privy to confidential information.

CCCCD's Interpreter Preparation Program has a greater number of Deaf teachers and ASL Assistants than non-Deaf teachers and ASL Assistants, which allows students the opportunity to become fluent in ASL and to develop culturally appropriate behaviors and responses.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Pass/Fail Option

Non-degree-seeking students may take a Sign Language class as Pass/Fail. Degree-seeking students should not pursue this option. The Pass/Fail Option will not satisfy the following:

- Degree-seeking transfer requirements
- IPPD special admissions/continuation requirement

NOTE: Students may not convert a Pass/Fail grade to a letter grade. Foreign language classes, including sign language, cannot be audited. See page 18 for details.

IPPD Admissions Requirements for the AAS degree

1. Complete of the Interpreter Preparation Program packet (IPP packet), which includes:
   - Official transcripts submitted to the CCCCD Admissions and Records Office
   - Application to the Interpreter Preparation Program, which is available from the program coordinator

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

- Current reading, writing, and mathematics assessment scores

2. Demonstrate minimum competencies in reading, writing, and mathematics. For program entry, students must assess into:
   READ 0305 or higher
   ENGL 0305 or higher
   MATH 0305 or higher
3. Complete the 34 credit-hour certificate program (see page 102) with a 2.5 or higher GPA. The certificate program includes successful completion or demonstrated competencies in:
   SGNL 1401 American Sign Language (ASL): Beginning I
   SGNL 1402 American Sign Language (ASL): Beginning II
   SGNL 2301 American Sign Language (ASL): Intermediate I
   SGNL 2302 American Sign Language (ASL): Intermediate II
4. Successfully pass IPPD Language Assessment, and participate in a personal interview to assess American Sign Language (ASL) language skills.
5. Provide evidence of BEI Certification in lieu of IPPD Assessment. Students must take grammar portion.

Continuation Requirements

Beginning with SGNL 2301, the student must maintain at least a "B" average in each IPPD course in order to continue in the degree or certificate program.

Program Exit Requirements

In order to graduate with a certificate or an AAS degree, the student must demonstrate the ability to:

- Interpret between 100-120 wpm
- Transliterate between 100-120 wpm
- Voice interpret with 85-100 percent accuracy

Career Opportunities

The career opportunities for persons with an IPPD Associate of Applied Science degree and appropriate certification are broad and varied and include educational, and community-based employment. In addition, many interpreters are self-employed and work as independent contractors.

Career opportunities for persons with an Interpreter Trainee certificate are more limited.

AAS – Interpreter Preparation Program/Deaf

68 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
MATH 1332 Contemporary Mathematics[1]
SGNL 1401 American Sign Language (ASL): Beginning I+
SPCH 1311 Fundamentals of Speech Communication[2]

Second Semester

SGNL 1402 American Sign Language (ASL): Beginning II+
SLNG 1311 Fingerspelling
SLNG 1447 Deaf Culture
PHED/DANC Any Activity Course[3]
Technical Core[4]

Summer

PHIL 2306 Introduction to Ethics[5]
SGNL 2301 American Sign Language (ASL): Intermediate I+

SECOND YEAR

First Semester

BUSG 2309 Small Business Management[6]
PSYC 2302 Applied Psychology[7]
SGNL 2302 American Sign Language (ASL): Intermediate II+
SLNG 1321 Introduction to the Interpreting Profession
Elective*

Second Semester

SLNG 2266 Practicum I - Sign Language Interpreter
SLNG 2301 Interpreting I
Technical Core[4]

Summer

SLNG 1350 Sign-to-Voice
SLNG 2267 Practicum II - Sign Language Interpreter (Capstone)
SLNG 2311 Specialized Interpreting/Transliterating

\+ American Sign Language courses are also transfer courses and may be used, at some institutions to satisfy a Foreign Language requirement.

[1] May substitute MATH 1324 or 1314 (recommended for transfer students)

[2] May substitute SPCH 1315 or 1321

[3] It is recommended the IPPD student take PHED 1338

[4] Technical Core: Students MUST select two (2) of the following courses (6 credit hours) with the approval of the program coordinator: ANTH 2351, DRAM 1351, ENGL 1302, SPCH 1315 or 1321

[5] PHIL 2306 is recommended for IPPD majors, but student may substitute ARTS 1301, 1303, or 1304, DRAM 1310, MUSI 1306 or 1307, or any PHIL course

[6] BUSG 2309 is recommended for IPPD majors, but student may substitute ECON 1301, 2301, or 2302

[7] May substitute PSYC 2301

* Elective (3 credit hours): Students must contact the program coordinator before choosing one of the following courses: BMGT 2309, BUSI 1307, CRIJ 1306 or 1313, SLNG 1391, SOCI 1306 or 2319, SPCH 2377, or SRGT 1301

NOTE: The second digit in a course number indicates the number of credit hours for that course.

CERTIFICATE

Interpreter Trainee Certificate

34 credit hours

FIRST YEAR

First Semester

SGNL 1401 American Sign Language (ASL): Beginning I+
SLNG 1447 Deaf Culture
Elective*
Elective*

Second Semester

SGNL 1402 American Sign Language (ASL): Beginning II+
SLNG 1311 Fingerspelling
PHED/DANC Any Activity Course[1]
Elective*

Summer

SGNL 2301 American Sign Language (ASL): Intermediate I+

SECOND YEAR

First Semester

SGNL 2302 American Sign Language (ASL): Intermediate II+
SLNG 1321 Introduction to the Interpreting Profession (Capstone)

+ American Sign Language courses are also transfer courses and may be used to satisfy a Foreign Language requirement.
[1] May substitute PHED 1338
* Electives (9 credit hours): ANTH 2351, BMGT 2309, BUSG 2309, BUSI 1307, DRAM 1351, ENGL 1301 or 1302, or SPCH 2377

NOTE: Degree-seeking students will take the IPPD Language Assessment after completing the IPPD certificate.

MANAGEMENT DEVELOPMENT

Program Coordinator:

Russell Kunz . . . . . .PRC-H230C 972.377.1702

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

Management Development is no longer a field just for people who desire to be managers. Today organizations are empowering all individuals, giving them more responsibility and requiring more knowledge.

CCCCD's Management Development degree provides students the ability to relate with others, the skills to work in a team, the knowledge to initiate change, and the experience to solve problems. Topics include basic management foundations and theories, human resources management, human relations training, financial management, and capital acquisition skills.

This degree is also excellent for people who wish to major in another field but need some business and management skills. All organizations have a business approach that requires individuals to be adept at planning, organizing, leading, and controlling the many activities that accompany a successful business venture.

The Criminal Justice specialization is designed for law enforcement officers who want to be promoted in rank but lack the sufficient transferable coursework in a related field. The program will transfer directly to UNT or other universities with similar programs and will prepare officers to be promoted into supervision/management positions. This specialization focuses more on a general academic study of criminal justice.

The Project Management certificate was designed for people who work in fields where this knowledge, in addition to their primary degree work, is required to obtain a job. The course contents were created from recommendations by members of the Project Management Institute and will provide individuals with the necessary skills in negotiation and conflict management, process planning and outcome management, and various measures of control and costing.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Every business and organization has leaders and/or people who perform leadership tasks. Therefore, this degree can apply to any field including government and public service.

AAS – Management Development

61 credit hours

FIRST YEAR

First Semester

BMGT 1303 Principles of Management
BMGT 1307 High Performance Work Teams
COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[1]

Second Semester

ACCT 2301 Financial Accounting
BMGT 1301 Supervision
ECON 1301 Introduction to Economics[2]
MATH 1332 Contemporary Mathematics[3]
PHED/DANC Any activity course[4]
SPCH 1311 Fundamentals of Speech Communication[5]

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

SECOND YEAR

First Semester

BMGT 2310 Financial Management
BMGT 2331 Principles of Quality Management
HRPO 2301 Human Resources Management
ITSW 1304 Introduction to Spreadsheets – Excel
PSYC 2302 Applied Psychology[6]

Second Semester

BMGT 2309 Leadership
BMGT 2311 Management of Change
BMGT 2341 Strategic Management (Capstone)
BMGT 2382 Cooperative Education – Business Administration and Management, General[7]
QCTC 1303 Quality Control

1 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
2 May substitute ECON 2301 or 2302
3 May substitute MATH 1324 or 1314 (recommended for transfer students)
4 May substitute PHED 1338
5 May substitute SPCH 1315 or 1321
6 May substitute PSYC 2301
7 May substitute BMGT 1343 with consent of program coordinator

NOTE: May substitute BMGT 1342, 1343, or 1344 for any BMGT, HRP0, or QCTC course, except for Capstone course

Criminal Justice Specialization

61 credit hours

FIRST YEAR

First Semester

BMGT 1303 Principles of Management
BMGT 1307 High Performance Work Teams
COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
HUMA 1301 Introduction to the Humanities[1]

Second Semester

BMGT 1301 Supervision
CRIJ 1301 Introduction to Criminal Justice
ECON 1301 Introduction to Economics[2]
MATH 1332 Contemporary Mathematics[3]
SPCH 1311 Fundamentals of Speech Communication[4]

SECOND YEAR

First Semester

BMGT 2310 Financial Management
BMGT 2331 Principles of Quality Management
CRIJ 1306 Court Systems and Practices
CRIJ 2323 Legal Aspects of Law Enforcement
PHED/DANC Any activity course[5]
PSYC 2302 Applied Psychology[6]

Second Semester

BMGT 2309 Leadership
BMGT 2311 Management of Change (Capstone)
BMGT 2382 Cooperative Education – Business Administration and Management, General[7]
CRIJ 1307 Crime in America
HRPO 2301 Human Resources Management

1 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
2 May substitute ECON 2301 or 2302
3 May substitute MATH 1324 or 1314 (recommended for transfer students)
4 May substitute SPCH 1315 or 1321
5 May substitute PHED 1338
6 May substitute PSYC 2301
7 May substitute BMGT 1344 with consent of program coordinator

NOTE: May substitute BMGT 1342, 1343, or 1344 for any BMGT, HRP0, or QCTC course, except for Capstone course

CERTIFICATES

Management Development Certificate

18 credit hours

FIRST YEAR

First Semester

BMGT 1301 Supervision[1]
BMGT 1303 Principles of Management
BMGT 2310 Financial Management

Second Semester

BMGT 2309 Leadership (Capstone)
BMGT 2311 Management of Change
BMGT 2341 Strategic Management

1 May substitute QCTC 1303

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Criminal Justice Specialization

15 credit hours

FIRST YEAR

First Semester

BMGT 1301 Supervision
BMGT 1303 Principles of Management
CRIJ 1301 Introduction to Criminal Justice

Second Semester

BMGT 2309 Leadership (Capstone)
CRIJ 1307 Crime in America

Human Resources Management Specialization

15 credit hours

FIRST YEAR

First Semester

BMGT 1301 Supervision[1]
BMGT 1303 Principles of Management
BMGT 1307 High Performance Work Teams

Second Semester

BMGT 2309 Leadership (Capstone)
HRPO 2301 Human Resources Management

[1] May substitute QCTC 1303

Quality Management Specialization

15 credit hours

FIRST YEAR

First Semester

BMGT 1301 Supervision
BMGT 1303 Principles of Management
QCTC 1303 Quality Control

Second Semester

BMGT 2309 Leadership (Capstone)
BMGT 2331 Principles of Quality Management

Project Management Certificate

18 credit hours

FIRST YEAR

First Semester

BMGT 1343 Project Management
BMGT 1344 Negotiations and Conflict Management
BMGT 2311 Management of Change

Second Semester

BMGT 1342 Project Scope and Risk Management
BMGT 2309 Leadership (Capstone)
QCTC 1303 Quality Control

MARKETING

Program Coordinator:

Russell Kunz . . . . . .PRC-H230C 972.377.1702

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

Marketing incorporates professional education courses to prepare individuals for career paths with retail or wholesale organizations, profit or non-profit service organizations, governmental agencies, and academic institutions.

CCCCD's Marketing program is designed to give a thorough background in aspects of marketing and to provide methods for improving skills for people already employed in a marketing career. Marketing students who have questions should visit with the program coordinator.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Marketing provides the essential core of marketing practices and prepares students for positions in:

- Advertising
- Consulting
- Customer Service
- Directing
- E-Commerce
- Industrial Marketing Management
- International Marketing
- Marketing Management
- Promotion
- Retailing
- Sales
- Sales Management
- Wholesaling

AAS – Marketing

61 credit hours

FIRST YEAR

First Semester

ENGL 1301 Composition/Rhetoric I
MATH 1332 Contemporary Mathematics[1]
MRKG 1311 Principles of Marketing
SPCH 1311 Fundamentals of Speech Communication[2]
Elective*

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Second Semester

ACCT 2301 Financial Accounting
HUMA 1301 Introduction to the Humanities[3]
MRKG 2333 Principles of Selling
MRKG 2349 Advertising and Sales Promotion
PHED/DANC Any activity course[4]
PSYC 2302 Applied Psychology[5]

SECOND YEAR

First Semester

BMGT 1305 Communications in Management
BMGT 1396 Special Topics in General Retailing Operations
BUSG 2309 Small Business Management
COSC 1300 Computer Essentials
IBUS 1354 International Marketing Management

Second Semester

ECON 1301 Introduction to Economics[6]
MRKG 1301 Customer Relations
MRKG 1302 Principles of Retailing
MRKG 2348 Marketing Research and Strategies (Capstone)
MRKG 2381 Cooperative Education – Business Marketing and Marketing Management[7]

[1] May substitute MATH 1324 or 1314 (recommended for transfer students)
[2] May substitute SPCH 1315 or 1321
[3] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[4] May substitute PHED 1338
[5] May substitute PSYC 2301
[6] May substitute ECON 2301 or 2302
[7] May substitute BMGT 1344 with consent of program coordinator
[*] Electives (3 credit hours): ARTC 1305 or 2311, BMGT 1307, COMM 1307, or MRKG 1380

Marketing/Business Management Specialization

61 credit hours

FIRST YEAR

First Semester

BMGT 1303 Principles of Management
COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
MRKG 1311 Principles of Marketing
SPCH 1311 Fundamentals of Speech Communication[1]

Second Semester

BMGT 2310 Financial Management[2]
BMGT 1344 Negotiations and Conflict Management
HUMA 1301 Introduction to the Humanities[3]
MRKG 1301 Customer Relations
MRKG 1302 Principles of Retailing
PHED/DANC Any Activity Course[4]

SECOND YEAR

First Semester

BMGT 2309 Leadership
MATH 1332 Contemporary Mathematics[5]
MRKG 2333 Principles of Selling
MRKG 2348 Marketing Research and Strategies
PSYC 2302 Applied Psychology[6]

Second Semester

BMGT 1305 Communications in Management
BMGT 2341 Strategic Management (Capstone)
ECON 1301 Introduction to Economics[7]
MRKG 2349 Advertising and Sales Promotion
Elective[*]

[1] May substitute SPCH 1315 or 1321
[2] May substitute ACCT 2301
[3] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[4] May substitute PHED 1338
[5] May substitute MATH 1324 or 1314 (recommended for transfer students)
[6] May substitute PSYC 2301
[7] May substitute ECON 2301 or 2302
[*] Electives: BMGT 1307, 2311, or 2331, HRPO 2301, or IBUS 1354

CERTIFICATES

Marketing Certificate

18 credit hours

FIRST YEAR

First Semester

MRKG 1311 Principles of Marketing
MRKG 2333 Principles of Selling
MRKG 2349 Advertising and Sales Promotion

Second Semester

MRKG 1301 Customer Relations[1]
MRKG 1302 Principles of Retailing
MRKG 2348 Marketing Research and Strategies (Capstone)

[1] May substitute BUSG 2309

NOTE: The second digit in a course number indicates the number of credit hours for that course.

MUSIC, COMMERCIAL

Also see Music, page 56.

Program Coordinator:

Brian Allison . . . . . .SCC-B182 . . . . . .972.881.5813

Academic Advisor:

Todd Fields . . . . . .SCC-G105 . . . . . .972.881.5903

CCCCD's Commercial Music program provides career training in performance, audio engineering and sound reinforcement, electronic music, and composition/songwriting. Internship opportunities are available through the Cooperative Work Experience program for practical training in the field.

Many CCCCD graduates perform professionally or work in recording studios, tape duplication and editing facilities, or sound reinforcement companies.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

The Commercial Music program prepares students for positions in:

- Audio Duplication/Manufacturing
- Audio Engineering
- Digital Audio Editing
- Instrumental/Vocal Arranging
- Jingle Composition
- Music Marketing
- Music Transcribing
- Performance
- Studio Management
- Synthesizer Programming

AAS – Commercial Music

62 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
MUSB 1305 Survey of the Music Business
MUSC 1327 Audio Engineering I
MUSI 1301 Music Fundamentals
MUSI 1171 Leisure Piano I[1]
Elective*

Second Semester

MUSI 1116 Aural Skills I
MUSI 1172 Leisure Piano II[2]
MUSI 1311 Music Theory I
Elective*
Elective*
Elective*
Elective*

SECOND YEAR

First Semester

MUSC 1331 MIDI 1
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra
Elective*
Elective*

Second Semester

MUSI 1307 Introduction to Music Literature[3]
MUSB 2380 Cooperative Education – Music Business Management and Merchandising (Capstone)
PSYC 2301 General Psychology[4]
PHED/DANC Any activity course[5]
Elective*
Elective*

[1] May substitute MUSI 1181
[2] May substitute MUSI 1182
[3] Required to fulfill the core requirement in Fine Arts for Music, Commercial majors
[4] May substitute PSYC 2302
[5] May substitute PHED 1338
* Electives (select 25 credit hours): Any MUAP course (maximum of 8 credit hours), any MUEN courses (maximum of 4 credit hours), MUSB 1301 or 2301, MUSC 1209, 1303, 1321, 1329, 1333, 2314, 2330, 2343, 2345, 2351, 2355, 2405, 2427, 2447, or 2448, MUSI 1117, 1183, 1184, 1192, 1193, 1312, 1386, 2116, 2117, 2181, 2182, 2192, 2193, 2311, or 2312

CERTIFICATE

Audio Engineering Certificate

31 credit hours

FIRST YEAR

First Semester

MUSB 1305 Survey of the Music Business
MUSC 1327 Audio Engineering I[1]
MUSC 2405 Sound Reinforcement Systems Technology
MUSC 2427 Audio Engineering II[1]
Elective*

Second Semester

MUSB 2301 Music Merchandising and Marketing
MUSC 2343 Audio Engineering Electronics Troubleshooting
MUSC 2447 Audio Engineering III[1]
MUSC 2448 Audio Engineering IV[1] (Capstone)

[1] Taught in an eight-week format
* Electives (3 credit hours): MUSB 1301 or 2309, MUSC 1303, 1331, 1333, or 2351, or MUSI 1301

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

NURSING

Program Director:

Dr. Nell Ard . . . . . .CPC-E310 . . . . . .972.548.6883

Academic Advisor:

Lynne Meyer . . . . . .SCC-G107 . . . . . .972.881.5114

CCCCD's Associate Degree Nursing (ADN) Program prepares students to make application to the Board of Nurse Examiners for licensure as a registered nurse. The nursing curriculum is approved by the Board of Nurse Examiners for the State of Texas and accredited by the National League for Nursing. Students must meet eligibility requirements for licensure as established by the Board of Nurse Examiners for the State of Texas. If an individual has reason to believe he is ineligible for licensure, he may petition the Board for a declaratory order. This should be done prior to entering the program. Contact the program director for further information.

The course of study consists of approved nursing courses from the Workforce Education Course Manual of Texas. These courses must be taken in sequence to assure progression of content from simple to complex.

Collin County healthcare facilities enthusiastically support the ADN program. Several healthcare facilities throughout the Metroplex are used for the clinical experience. The role of the nurse continues to change in an evolving healthcare system. Students are also given varied experiences in community-focused care.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

For students interested in transferring to a BSN program, please see the AS – Nursing Field of Study on page 66.

Accreditation

The National League for Nursing Accrediting Commission has recently granted continued re-accreditation to the Nursing program for eight years. They may be contacted at:

61 Broadway
New York, NY 10006
212.363.5555, extension 153

Scholarships

Various scholarships are available to students when they have been accepted into the Nursing program. Most scholarships are awarded based on financial need. Other types of monetary support are available through the college's Financial Aid Office.

Additional Admissions Requirements

- Complete pre-entrance course requirements with a minimum 2.5 GPA.
- Earn a GPA of 2.5 or greater on all courses applicable to the Nursing program.
- Submit official copies of all college transcripts.
- Complete the PSB (Nursing School Aptitude Exam) prior to January 31 with a satisfactory result.

Admission to the Nursing program is selective. Admission to the college does not guarantee admission to the Nursing program. Registration is by permission only. Information and applications may be obtained from the program coordinator or the Social Sciences, Health, and Public Services Office.

Placement in mathematics and English courses is based upon the results of each student's assessments and subjects completed before admission.

Pre-Nursing Work Experience (RNSG 1266)

This optional work-based academic course is available to provide exposure to the nursing field. Although it is not a pre-requisite for entry into the AAS in Nursing program, and the credit earned (2 credit hours) is not part of the AAS in Nursing program, passing this course does result in a Nurse Assistant Certificate and valuable work experience.

AAS – Nursing

71 credit hours

Prerequisites:

BIOL	2401	Anatomy and Physiology I
BIOL	2402	Anatomy and Physiology II
BIOL	2420	Microbiology
MATH	*1342*	*Statistics*

FIRST YEAR

First Semester

ENGL	*1301*	*Composition/Rhetoric I*
PSYC	*2301*	*General Psychology*
RNSG	1219	Integrated Nursing Skills I
RNSG	1360	Clinical I – Nursing (R. N. Training)
RNSG	1523	Introduction to Professional Nursing for Integrated Programs

Second Semester

PSYC	2314	Life Span Psychology
RNSG	1229	Integrated Nursing Skills II
RNSG	1361	Clinical II – Nursing (R. N. Training)
RNSG	2504	Integrated Care of the Client with Common Health Care Needs

NOTE: The second digit in a course number indicates the number of credit hours for that course.

SECOND YEAR

First Semester

RNSG 2460 Clinical III – Nursing (R. N. Training)
RNSG 2514 Integrated Care of the Client with Complex Health Care Needs
SOCI 1301 Introduction to Sociology [1]

Second Semester

HUMA 1301 Introduction to the Humanities [2]
RNSG 2207 Transition to Nursing Practice (Capstone)
RNSG 2535 Integrated Client Care Management
RNSG 2561 Clinical IV – Nursing (R. N. Training)

[1] May substitute SOCI 1306

[2] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course

NOTE - For those students considering completion of their BSN degree, the following additional courses are recommended:

BIOL 1322 Nutrition
CHEM 1405 Introduction to Chemistry I
– OR –
CHEM 1411 General Chemistry I

OFFICE SYSTEMS TECHNOLOGY

Also a Tech Prep Program
Also a Marketable Skills Achievement Award Program (refer to page 71.)

Program Coordinators:

Diana Ramsower . . . . . .SCC-J117 . . . . . .972.881.5835
Mary Jane Tobaben . . . . . .SCC-J116 . . . . . .972.881.5170

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

The Office Systems Technology program is designed to incorporate both the technical and behavioral aspects of careers in the general, legal, or medical fields. Areas of study include: office keyboarding skills; word processing; proofreading/editing; records management; transcription; financial responsibilities; business communications; database, presentation, and spreadsheet software; office management; legal document production; legal transcription; medical records management; and medical transcription.

Some of the courses required for this AAS degree are also excellent preparation for the experienced secretary who plans to take the Certified Professional Secretary exam. The secretary who has already passed the CPS exam may apply for academic credit from CCCCD to be applied toward the AAS degree in Office Systems Technology.

Tech Prep students who took collegiate-level courses in Office Systems Technology while in high school may elect to receive college credit by contacting a CCCCD academic advisor. A petition for Tech Prep credit should be completed as soon as possible upon admission to CCCCD.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Job opportunities in the Office Systems Technology field include:

- Accounting Clerk
- Administrative Assistant/Secretary
- Human Resources Assistant
- Legal Office Support
- Medical Insurance Claims Support
- Medical Office Support
- Medical Transcriptionist
- Receptionist
- Virtual Office Assistant
- Word Processing Specialist

AAS Office Systems Technology

63 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
POFT 1307 Proofreading and Editing*
POFT 1319 Records and Information Management I*
POFT 2301 Document Formatting and Skillbuilding*

Second Semester

ACNT 1303 Introduction to Accounting I[1,*]
MATH 1332 Contemporary Mathematics[2]
PHED/DANC Any activity course[3]
POFI 2301 Word Processing*
POFT 2203 Speed and Accuracy Building*
PSYC 2302 Applied Psychology[4]

Summer

HUMA 1301 Introduction to the Humanities[5]
Elective **

SECOND YEAR

First Semester

ECON 1301 Introduction to Economics[6]
ITSC 1309 Integrated Software Applications I[1,*]
POFT 2312 Business Correspondence and Communication*
Elective **
Elective **

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Second Semester

POFT 1349 Administrative Office Procedures II (Capstone)*
SPCH 1311 Fundamentals of Speech Communication[7]
Elective **
Elective **

[1] Tech prep course which may have been completed in high school
[2] May substitute MATH 1324 or 1314
[3] May substitute PHED 1338
[4] May substitute PSYC 2301
[5] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
[6] May substitute ECON 2301 or 2302
[7] May substitute SPCH 1315 or 1321
* Prerequisite: POFT 1329[1] or a keyboarding course taken in high school
** Electives (15 hours): BMGT 2309, ITSC 1321*, ITSW 1304* or 1307*, LGLA 1307, POFI 13011, *, or 2331*, POFL 1359*, 1380*, or 2301*, POFM 1321, 1331*, 1353*, or 1380*, POFT 1380* or 2380*, or SRGT 1301

CERTIFICATES

Office Systems Technology Certificate

26 credit hours

FIRST YEAR

First Semester

POFI 2301 Word Processing*
POFT 1307 Proofreading and Editing*
POFT 1319 Records and Information Management I*
POFT 2203 Speed and Accuracy Building*
POFT 2301 Document Formatting and Skillbuilding*

Second Semester

ITSC 1309 Integrated Software Applications I[1,]*
POFT 1349 Administrative Office Procedures II (Capstone)*
POFT 2312 Business Correspondence and Communication*
Elective **

[1] Tech prep course which may have been completed in high school
* Prerequisite: POFT 1329[1] or a keyboarding course taken in high school
** Electives (3 credit hours): ACNT 13031, *, POFI 2331, or POFT 1380

Legal Office Support Specialization

32 credit hours

FIRST YEAR

First Semester

LGLA 1307 Introduction to Law and the Legal Profession
POFI 1301 Computer Applications I[1,]*
POFT 1307 Proofreading and Editing*
POFT 1319 Records and Information Management I*
POFT 2203 Speed and Accuracy Building*
POFT 2301 Document Formatting and Skillbuilding*

Second Semester

ITSC 1309 Integrated Software Applications I[1,]*
POFL 1359 Legal Transcription *
POFL 2301 Legal Document Processing*
POFT 1349 Administrative Office Procedures II (Capstone)*
Elective**

[1] Tech prep course which may have been completed in high school
* Prerequisite: POFT 1329[1] or a keyboarding course taken in high school
** Electives (3 credit hours): ITSW 1304* or 1307*, POFI 2301* or 2331*, POFL 1380*, or POFT 2312*

Medical Office Support Specialization

35 credit hours

FIRST YEAR

First Semester

POFI 1301 Computer Applications I[1,]*
POFT 1307 Proofreading and Editing*
POFT 1319 Records and Information Management I*
POFT 2301 Document Formatting and Skillbuilding*
SRGT 1301 Medical Terminology I

Second Semester

ITSC 1309 Integrated Software Applications I[1,]*
POFM 1321 Medical Law and Ethics for Office Personnel
POFM 1353 Medical Coding
POFT 2312 Business Correspondence and Communication*
POFM 1331 Medical Transcription I*
POFT 2203 Speed and Accuracy Building*

Summer

POFT 1349 Administrative Office Procedures II (Capstone)*

[1] Tech prep course which may have been completed in high school
* Prerequisite: POFT 1329[1] or a keyboarding class taken in high school

NOTE: The second digit in a course number indicates the number of credit hours for that course.

Medical Transcription Specialization

38 credit hours

FIRST YEAR

First Semester

POFI 1301 Computer Applications I[1, *]
POFM 1331 Medical Transcription I[*]
POFT 1307 Proofreading and Editing[*]
POFT 2203 Speed and Accuracy Building[*]
SRGT 1301 Medical Terminology I

Second Semester

BIOL 2404 Human Anatomy and Physiology Basics
HPRS 2301 Pathophysiology
POFM 2313 Medical Transcription II[*]
POFT 2301 Document Formatting and Skillbuilding[*]

Summer

HPRS 2300 Pharmacology for Health Professions
POFM 1321 Medical Law and Ethics for Office Personnel
POFM 2317 Medical Transcription III[*]
MRMT 1267 Practicum (or Field Experience) – Medical Transcription (Capstone)[2, *]

[1] Tech prep course which may have been completed in high school
[2] May substitute MRMT 1282[*]
[*] Prerequisite: POFT 1329[1] or a keyboarding class taken in high school

PARALEGAL/LEGAL ASSISTANT

Program Coordinator:

Peter Dawson . . . . . .SCC-K227 . . . . . .972.516.5031

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

Law firms, corporations, and governmental agencies hire paralegals/legal assistants to manage an array of legal responsibilities under the direction and supervision of a licensed attorney. Paralegals must be proficient in computer skills, legal terminology, and legal procedures. The AAS degree in Paralegal/Legal Assistant provides excellent training in these areas and offers opportunities for specialization.

Texas Woman's University (TWU) and CCCCD Paralegal/Legal Assistant programs entered an articulation agreement effective fall 1999, which establishes a plan for students to obtain an Associate of Arts degree from CCCCD and a Bachelor of Science degree in Paralegal Studies from TWU. See page 57 for details.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Employment opportunities for entry-level paralegals/legal assistants include the following:

- Law Firms
- Corporations
- Governmental agencies

Responsibilities routinely performed by paralegals/legal assistants include:

- Drafting legal documents
- Performing legal research
- Obtaining information relevant to cases
- Interviewing clients and witnesses
- Assisting with trial preparation

AAS – Paralegal/Legal Assistant

63 credit hours

FIRST YEAR

First Semester

COSC 1300 Computer Essentials
ENGL 1301 Composition/Rhetoric I
LGLA 1307 Introduction to Law and the Legal Professions
MATH 1332 Contemporary Mathematics[1]
Elective[*]

Second Semester

ECON 1301 Introduction to Economics[2]
ENGL 1302 Composition/Rhetoric II
LGLA 1303 Legal Research
PHED/DANC Any activity course[3]
PSYC 2302 Applied Psychology[4]

Summer

HUMA 1301 Introduction to the Humanities[5]
Elective[**]

SECOND YEAR

First Semester

LGLA 1346 Civil Litigation I
LGLA 1355 Family Law
LGLA 2303 Torts and Personal Injury Law
LGLA 2307 Law Office Management
SPCH 1311 Fundamentals of Speech Communication[6]

Second Semester

LGLA 1353 Wills, Trusts, and Probate Administration
LGLA 2239 Certified Legal Assistant Review (Capstone)[7]
Elective[***]
Elective[***]
Elective[***]

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

[1] May substitute MATH 1324 or 1314 (recommended for transfer students)

[2] May substitute ECON 2301 or 2302

[3] May substitute PHED 1338

[4] May substitute PSYC 2301

[5] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course

[6] May substitute SPCH 1315 or 1321

[7] Successful completion of the AAS Paralegal/Legal Assistant program meets the current eligibility requirements needed to qualify to take the Certified Legal Assistant Examination; however, additional education or professional experience may be required in the future.

* Elective (3 credit hours): POFI 1301 or 2301

** Open Elective (3 credit hours)

*** Electives (9 credit hours): BUSI 2301, CRIJ 1306 or 1310, LGLA 1305, 1347, 1380, or 2333, or RELE 1309

NOTE: No substitutions permitted, unless specified.

CERTIFICATES

Paralegal General Certificate

29 credit hours

FIRST YEAR

First Semester

LGLA	1303	Legal Research
LGLA	1307	Introduction to Law and the Legal Professions
LGLA	1346	Civil Litigation I
LGLA	2307	Law Office Management
*Elective		Technology Elective

Second Semester

LGLA	1353	Wills, Trusts, and Probate Administration
LGLA	1355	Family Law
LGLA	2239	Certified Legal Assistant Review (Capstone)[1]
LGLA	2303	Torts and Personal Injury Law
**Elective		Law Elective

[1] Successful completion of the Paralegal Certificate program does not, in and of itself, qualify a student to take the Certified Legal Assistant Examination. Additional education or professional experience may be required.

* Electives (3 credit hours): COSC 1300, POFI 1301 or 2301

** Electives (3 credit hours): BUSI 2301, CRIJ 1306 or 1310, LGLA 1305, 1347, 1380, or 2333, or RELE 1309

NOTE: No substitutions permitted

REAL ESTATE

Program Coordinator:

Mary Milford . . . . . .CYC-B325 . . . . . .972.985.3709

Academic Advisor:

Al Gober . . . . . .PRC-F143 . . . . . .972.377.1780

Real Estate is a dynamic field in which highly motivated men and women can and do create their own success stories. The degree program in Real Estate is designed with flexibility to allow students to successfully achieve a goal, whether it be personal knowledge, receipt of a degree, completion of a certificate program, transfer to a college or university, or real estate licensure.

Students will explore a variety of topics including fundamentals and principles of real estate; sources of financing; state and federal influences on financing; legal rights of owners, buyers, and brokers; property appraisal; contract negotiations; and closing. An excellent instructional staff and a cooperative education program with local brokers give real estate students at CCCCD a personalized, practical, high quality educational experience.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

The study of real estate can be the beginning of an interesting and profitable career. Real estate is a vast and complex industry, and career options are numerous. Some of the possibilities include:

- Appraisal
- Brokerage
- Counseling
- Property Management
- Education
- Finance
- Property Development

AAS – Real Estate

60 credit hours

FIRST YEAR

First Semester

COSC	*1300*	*Computer Essentials*
ENGL	*1301*	*Composition/Rhetoric I*
MATH	*1332*	*Contemporary Mathematics*[1]
PHED/DANC		*Any activity course*[2]
RELE	1301	Principles of Real Estate I
RELE	2301	Law of Agency

Second Semester

ENGL	1302	Composition/Rhetoric II
POFT	1127	Introduction to Keyboarding
RELE	1311	Real Estate Law of Contracts
RELE	1325	Real Estate Mathematics
RELE	2309	Principles of Real Estate II
SPCH	*1311*	*Fundamentals of Speech Communication*[3]

NOTE: The second digit in a course number indicates the number of credit hours for that course.

SECOND YEAR

First Semester

BUSI 1301 Introduction to Business
ECON 1301 Introduction to Economics[4]
PSYC 2302 Applied Psychology[5]
RELE 1321 Real Estate Marketing
Elective*

Second Semester

HUMA 1301 Introduction to the Humanities[6]
RELE 1319 Real Estate Finance
RELE 2381 Cooperative Education – Real Estate (Capstone)
Elective**
Elective**

[1] May substitute MATH 1324 or 1314 (recommended for transfer students)
[2] May substitute PHED 1338
[3] May substitute SPCH 1315 or 1321
[4] May substitute ECON 2301 or 2302
[5] May substitute PSYC 2301
[6] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course

* Electives (3-9 credit hours): RELE 1303, 1307, 1309, 1315, 1327, 1391, or 2331

** Electives (0-6 credit hours): ACCT 2301, BMGT 1302 or 1303, BUSG 2309, BUSI 2301, HRPO 1392, ITSW 1304, RELE 1105, 1380, or 2103

CERTIFICATES

Real Estate General Certificate

15 credit hours

FIRST YEAR

First Semester

RELE 1301 Principles of Real Estate I
RELE 2301 Law of Agency
RELE 2309 Principles of Real Estate II

Second Semester

Elective*
Elective*
Capstone: Comprehensive exam

* Electives (6 credit hours): RELE 1105, 1303, 1307, 1309, 1311, 1315, 1319, 1321, 1325, 1327, 1380, 2103, 2331, or 2381, TREC-approved accredited college-related courses, or other coursework approved by program coordinator

Real Estate Brokers Certificate

24 credit hours

FIRST YEAR

First Semester

RELE 1301 Principles of Real Estate I
RELE 1311 Real Estate Law of Contracts
RELE 2301 Law of Agency
RELE 2309 Principles of Real Estate II

Second Semester

RELE 1319 Real Estate Finance
RELE 1321 Real Estate Marketing
Elective*
Elective*
Capstone: Comprehensive exam

* Electives (6 credit hours): RELE 1105, 1303, 1307, 1309, 1315, 1327, 1380, 2103, 2331, or 2381, TREC-approved accredited college-related courses, or other coursework approved by the program coordinator

RESPIRATORY CARE

Program Director:

David R. Gibson . . . . . .CPC-E306 . . . . . .972.548.6870

Academic Advisor:

Suzon Schroeder . . . . . .CPC-A108C 972.548.6779

CCCCD's Respiratory Care program prepares individuals for an allied health specialty in clinical care and management of respiratory disorders. The 22-month program graduates a student with an AAS degree and qualifies the individual to apply for the Registered Respiratory Therapist board examination.

Respiratory care courses transferred from other accredited programs may not exceed five years of age. In this program, the minimum passing grade for all academic courses and all Respiratory Care lecture courses is a "C". A minimum grade of "B" is required for all Respiratory Care clinical courses.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Additional Admission Requirements

- Provide proof of high school graduation or GED
- Submit official copies of all college transcripts
- Complete CCCCD reading, writing and mathematics assessments
- Complete Psychological Services Bureau (PSB), Health Occupations Aptitude Exam

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

Registration is by permission only. Information and applications may be obtained from the program director or the Social Sciences, Health, and Public Services Office.

Program Completion Requirements

- All students are required to complete comprehensive program examinations to receive their Certificate of Completion and degree. The Certified Respiratory Therapist Self Assessment Exam (CRT SAE) will be given in the fall semester of the Second Year. The Registered Respiratory Therapist Self Assessment Exam (RRT SAE) will be given in the spring semester. Satisfactory completion of these exams is required for graduation from the program.
- All students must complete BIOL 2401 and BIOL 2402 prior to entering clinical rotations during the summer term.
- Complete the written and skills exam in RSPT 2139 according to the standards set by the American Heart Association.

Transition Program

The college offers a transition program to allow students who hold a CRT credential and have one year of experience to receive their degree and become registry-eligible. Contact the program coordinator for more information.

Career Opportunities

Career opportunities in the health care industry for registered respiratory therapists are increasing rapidly. Recent surveys indicate that the supply of trained respiratory care professionals has not been sufficient to meet the progressive growth in demand.

AAS – Respiratory Care

72 credit hours

Pre-Entrance Requirements

A. Student must be prepared to take BIOL 2401 (Anatomy and Physiology) by meeting one of the following requirements:
   1. Completion of two years of high school biology within the last five years, or
   2. Completion of BIOL 1406 (General Biology).

B. Student must be prepared to enter college-level mathematics.

FIRST YEAR

First Semester

BIOL	2401	Anatomy and Physiology I
RSPT	1160	Clinical I – Respiratory Therapy Technician
RSPT	1201	Introduction to Respiratory Care
RSPT	1307	Cardiopulmonary Anatomy and Physiology
RSPT	1410	Respiratory Care Procedures I

Second Semester

BIOL	2402	Anatomy and Physiology II
RSPT	1317	Respiratory Care Pharmacology
RSPT	1361	Clinical II – Respiratory Therapy Technician
RSPT	1411	Respiratory Care Procedures II
RSPT	2310	Cardiopulmonary Disease

Summer

RSPT	1362	Clinical III – Respiratory Therapy Technician
RSPT	1471	Respiratory Care Procedures III

SECOND YEAR

First Semester

MATH	*1314*	*College Algebra*[1]
PSYC	*2301*	*General Psychology*[2]
RSPT	2355	Critical Care Monitoring
RSPT	2360	Clinical IV – Respiratory Therapy Technician
RSPT	2453	Neonatal/Pediatric Cardiopulmonary Care

Second Semester

BIOL	2420	Microbiology
ENGL	*1301*	*Composition/Rhetoric I*
HUMA	*1301*	*Introduction to the Humanities*[3]
RSPT	2139	Advanced Cardiac Life Support
RSPT	2231	Clinical Simulations in Respiratory Care
RSPT	2247	Specialties in Respiratory Care
RSPT	2361	Clinical V – Respiratory Therapy Technician (Capstone)

[1] May substitute a higher level mathematics course

[2] May substitute PSYC 2302, or SOCI 1301

[3] May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course

SEMICONDUCTOR MANUFACTURING TECHNOLOGY

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F142 . . . . . .972.377.1778

Semiconductor manufacturing consists of a series of complex processes by which miniaturized electrical devices or microchips are created for electronic equipment. Students in this program will receive instruction in related academic subjects, safety procedures, statistical process control techniques, and the operation of machinery and equipment for the fabrication and processing of semiconductors.

CCCCD's Semiconductor Manufacturing Technology program is a joint workforce education program with Richland College. The AAS degree program prepares students for employment as

NOTE: The second digit in a course number indicates the number of credit hours for that course.

semiconductor equipment technicians. As an alternative, students may complete the 38-credit hour certificate program that certifies them for employment as a semiconductor equipment operator.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Students successfully completing the Semiconductor Manufacturing Technology program will be prepared for employment in the following career areas:

- Manufacturing
- Equipment Technician
- Integrated Circuit Test Technician
- Clean Room Technician

AAS – Semiconductor Manufacturing Technology

70 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra
PHYS 1401 General Physics I
SMFT 1343 Semiconductor Manufacturing Technology I

Second Semester

CETT 1405 AC Circuits
CHEM 1405 Introduction to Chemistry I
CPMT 2337 Microcomputer Interfacing
HUMA 1301 Introduction to the Humanities[1]
MATH 1316 Trigonometry

Summer

CETT 1425 Digital Fundamentals
CETT 1429 Solid State Devices

SECOND YEAR

First Semester

CETT 1380 Cooperative Education - Computer Engineering Technology/Technician
CETT 1457 Linear Integrated Circuits
ELMT 1405 Basic Fluid Power
SPCH 1311 Fundamentals of Speech Communication[2]

Second Semester

ELMT 2437 Electronic Troubleshooting, Service, and Repair
INMT 1447 Industrial Automation
PSYC 2302 Applied Psychology[3]
Elective*
Capstone: Comprehensive exam

[1] Select from ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306, or 1307, or any PHIL course
[2] May substitute SPCH 1315 or 1321
[3] May substitute PSYC 2301
* Electives (3 credit hours): CETT 2380 or SMFT 2343

CERTIFICATES

Semiconductor Manufacturing Operator Certificate

38 credit hours

FIRST YEAR

First Semester

CETT 1403 DC Circuits
ENGL 1301 Composition/Rhetoric I
MATH 1314 College Algebra[1]
PSYC 2302 Applied Psychology
SMFT 1343 Semiconductor Manufacturing Technology I

Second Semester

CETT 1405 AC Circuits
CHEM 1405 Introduction to Chemistry I
MATH 1316 Trigonometry
PHYS 1401 General Physics I

Summer

CETT 1380 Cooperative Education - Computer Engineering Technology/Technician
ELMT 1405 Basic Fluid Power
Capstone: Comprehensive exam

[1] May substitute a higher level mathematics course

TELECOMMUNICATIONS TECHNOLOGY

Also a Tech Prep Program

Program Coordinator:

Wayne Jones . . . . . .PRC-H230A 972.377.1676

Academic Advisor:

Terrence Brennan . . . . . .PRC-F136 . . . . . .972.377.1778

CCCCD is located in the heart of the "Telecom Corridor" and is fortunate to be surrounded by the leaders in the telecommunications industry. The Telecommunications Technology degree and certificate programs were developed with strong industry input and support. Alcatel/DSC, Ericsson, Fujitsu, Lucent (AT&T), MCI/WorldCom, Nortel Networks, PrimeCo, Raytheon, Southwestern Bell, and several other companies continue to offer guidance as these programs evolve.

The AAS degree and certificate programs in Telecommunications Technology provide the skills needed to meet the demands common to all telecommunications industries. Related cooperative education courses provide students the

NOTE: Italicized course numbers and titles denote AAS Core Curriculum.

opportunity to get hands-on experience in state-of-the-art companies, thus further preparing themselves for successful employment in this high-tech, high-growth field.

Students planning to transfer to a college or university should check with the CCCCD academic advisor prior to beginning this program to verify course transferability.

Career Opportunities

Students successfully completing the Telecommunications Technology program will be prepared for employment in the following career areas:

- Customer Service
- Manufacturing
- Switching Technology
- Telecommunications Equipment Installation
- Transmission Technology
- Wireless Communications

AAS – Telecommunications Technology

71 credit hours

FIRST YEAR

First Semester

CETT 1409 DC-AC Circuits
ENGL 1301 Composition/Rhetoric I
INTC 1305 Introduction to Electronic Instrumentation
MATH 1314 College Algebra[1]
SPCH 1311 Fundamentals of Speech Communication[2]

Second Semester

CETT 1325 Digital Fundamentals[3]
CETT 1431 Technical Programming
MATH 1316 Trigonometry
PHYS 1401 General Physics I
Specialization Course[4]

Summer

EECT 2439 Communications Circuits
Specialization Course[4]

SECOND YEAR

First Semester

EECT 1380 Cooperative Education – Electrical, Electronic, and Communications Engineering Technology/Technician
HUMA 1301 Introduction to the Humanities[5]
PSYC 2302 Applied Psychology[6]
Specialization Course[4]
Specialization Course[4]

Second Semester

EECT 2435 Telecommunications (Capstone)
Specialization Course[4]
Specialization Course[4]
Specialization Course[4]

1 May substitute a higher level MATH course
2 May substitute SPCH 1315 or 1321
3 Tech Prep course which may have been completed in high school
4 Select one of the following specializations: Telecommunications Customer Service, Telecommunications Manufacturing, Telecommunications Switching, Telecommunications Transmission, or Wireless Telecommunications. Each specialization requires the student to complete a minimum of 25 credit hours in the area of specialization. Contact the program coordinator for more information.
5 May substitute ARTS 1301, 1303, or 1304, DRAM 1310, HUMA 1302, MUSI 1306 or 1307, or any PHIL course
6 May substitute PSYC 2301

CERTIFICATES

Telecommunications Technology Certificate

34 credit hours

FIRST YEAR

First Semester

CETT 1325 Digital Fundamentals[1]
CETT 1409 DC-AC Circuits
CETT 1431 Technical Programming
INTC 1305 Introduction to Electronic Instrumentation

Second Semester

EECT 1380 Cooperative Education - Electrical, Electronic, and Communications Engineering Technology/Technician
EECT 2439 Communications Circuits
Specialization Course[2]
Specialization Course[2]
Specialization Course[2]

Summer

EECT 2435 Telecommunications (Capstone)

1 Tech Prep course which may have been completed in high school
2 Student must select one of the following specializations: Telecommunications Customer Service, Telecommunications Manufacturing, Telecommunications Switching, Telecommunications Transmission, or Wireless Telecommunications. Each specialization requires the student to complete a minimum of 10 credit hours in the area of specialization. Contact the program coordinator for more information.

NOTE: The second digit in a course number indicates the number of credit hours for that course.