



NORTH CENTRAL TEXAS COLLEGE

Curricula – Academic

INSTRUCTIONAL ORGANIZATION

The instructional programs offered by North Central Texas College are organized, according to major subject areas or “disciplines,” under the administrative supervision of Department Chairs (assisted, in some cases, by individual Program Coordinators) to whom faculty members report directly. Department Chairs, in turn, report directly to one of three instructional deans—either the Dean of Arts & Sciences (primarily “academic transfer” programs) or the Dean of Advanced and Applied Technologies or the Dean of Health Sciences (primarily “technical” programs). Administrative support for certain workforce-related instruction and customized training programs also is provided by the Dean of Lifelong Learning. All these instructional administrators are listed by name in the College Personnel section of this catalog.

I. DEPARTMENT OF SOCIAL SCIENCE

- History
- Government
- Humanities
- Psychology
- Economics
- Sociology
- Philosophy

II. DEPARTMENT OF ENGLISH, SPEECH, AND FOREIGN LANGUAGE

- English
- Speech
- Foreign Language

III. DEPARTMENT OF FINE ARTS

- Art
- Drama
- Music
- Dance

IV. DEPARTMENT OF MATHEMATICS

- Mathematics
- Physics

V. DEPARTMENT OF SCIENCE

- Biology
- Astronomy (& Planetarium)
- Chemistry

VI. PHYSICAL EDUCATION/ATHLETICS

VII. DEPARTMENT OF COLLEGE PREPARATORY STUDIES

- College Preparatory English
- College Preparatory Reading
- College Preparatory Mathematics

VIII. ASSOCIATE OF ARTS IN TEACHING

- Education
- Early Childhood Education

IX. ADVANCED AND APPLIED TECHNOLOGIES

- Accounting
- Business Management
- Drafting & Design
- Office Systems Technology
- Computer Information Systems & Technology
- Precision Machining
- Computer-Aided Manufacturing
- Computer Science
- Agriculture
- Equine Science
- Farm & Ranch Management
- Horticulture
 - Includes: Experimental Farm, Beef Cattle Evaluation Center, Equine Center & Breeding Lab, and Greenhouse

X. HEALTH SCIENCES

- Associate Degree Nursing
- Vocational Nursing (LVN)
- Emergency Medical Technology
- Surgical Technology
- Law Enforcement
- Cosmetology
- Radiological Technology

For a listing of all Department Chairs & Program Coordinators, see Page 7 of this catalog.

NUMBERING OF COURSES

Courses are designated by four-digit numbers. The first digit indicates the level at which the course is taught. For example, a 1 indicates a freshman level course and a 2 indicates a sophomore level course. The second digit indicates the semester hour value of the course. The third and fourth digits indicate the distinguishing number of the course. For example, Government (GOVT) 2305 is a sophomore (2) level, three-semester-hour (3) course. The distinguishing number of this particular government course is 05.

Capsule descriptions of the content of all the courses listed below are set forth in the Course Descriptions section of this catalog.

DEGREE REQUIREMENTS

Candidates for either an Associate of Arts or an Associate of Science degree must satisfy certain basic requirements in addition to the major courses and electives in their particular area of interest. These basic requirements are outlined in detail in the Academic Policy and College Regulations section of this catalog.

Because of the wide diversity of program content in those areas which lead to the Associate of Applied Science Degree, basic degree requirements

are not as uniform as those for the Associate of Arts and Associate of Science degrees. Therefore, specific requirements for each of these programs are listed under the Curricula—Technology section of this catalog.

Health-Related Programs: These programs—Nursing, EMS, etc.—may have special, additional requirements in regard to admissions, progression and other matters, and these are listed separately under the Curricula — Health Sciences section of this catalog.

CATALOG RESTRICTIONS

A student who enrolls at North Central Texas College during any academic year and who earns college credit for work done during that year may graduate under the degree requirement provision of (1) the current catalog, (2) the catalog in force during the student's first year of enrollment, or (3) the catalog of any succeeding year during which the student was enrolled. This applies provided the student meets the requirements not later than five years from the date of the catalog selected. (Refer also to "Degree and Graduation Requirements" in the Academic Policy and College Regulations section of this catalog.)

Planning to transfer? Do it the SMART way!

If you're thinking of transferring from NCTC to a university, here are two great tips on how to do it the really SMART way:

1 Don't be in too big a hurry—stay at NCTC and complete your Core Curriculum. Completion of these 43 semester credit hours of Core courses is a requirement at all public colleges and universities in Texas, so if you don't do it at NCTC, you'll have to do it after transferring. The smart thing to do is complete your Core courses here where it's much less costly, where classes are smaller, where you'll get more individual attention from professors and so on.

Keep in mind that this Core transfers as a block ONLY if you complete it, but the good news is that if you complete it at NCTC, it *transfers entirely* to any other public university in Texas (UNT, A&M, UT, you

name it) no questions asked. Check the current NCTC Catalog or talk to your advisor or a counselor to learn more about NCTC's Core Curriculum courses.

2 Stay at NCTC and complete your Associate of Arts or Associate of Science degree! So many students (to their great regret later) transfer lacking only a few courses to complete degree requirements. Yes, your goal is a Bachelor's Degree (or higher), but what if something happens to delay or prevent your attaining that 4-year degree? In today's workplace, an Associate Degree is valuable. Completing that degree says something important about you to potential employers. And consider this—if you'll be working while seeking your 4-year degree, that AA or AS can help you land a much better job. Be smart—complete your Associate Degree at North Central Texas College before transferring.

**General Education for a Transfer-Based Associate Degree
Core Curriculum – Required Hours 43-45**

<u>Course Designation</u>	<u>Credit Hours</u>
Written Communication (both courses):	
ENGL 1301, 1302.....	6
Oral Communication (select one course):	
SPCH 1315, 1318, 1321	3
Mathematics (select one course):	
MATH 1314, 1316, 1324, 1325, 1332, 2342, 2412, 2413, 2414.....	3-4
Lab/Natural Sciences (select two courses):	
BIOL 1408, 1411, 1413, 2401, 2402, 2406, 2420 CHEM 1411, 1412, 1413, 2423, 2425 • PHYS 1401, 1402, 1412, 1415, 2425, 2426	8
Visual & Performing Arts (select one course):	
ARTS 1301, 1303, 1304, 1311, 1316, 2316, 2326, 2341, 2346 DRAM 1310, 1330, 2331, 1351, 1352 DANC 2303, 2304, 1151, 1152, 2151, 2152 HUMA 1371 • MUEN 1131, 1141, 1154, 1171, MUSI 1301, 1306	3
Humanities: Literature (select one course):	
ENGL 2307, 2322, 2323, 2327, 2328, 2332, 2333 • PHIL 1301	3
U.S. History (both courses):	
HIST 1301, 1302	6
Government (both courses):	
GOVT 2305, 2306.....	6
Social Science/Behavioral Science/Cultural Awareness (select one course):	
ECON 2301, 2302 • HIST 2301, 2321, 2322 • PSYC 2301, 2306, 2314, 2315, 2319 SOC 1301, 1306, 2301, 2319 • SPAN 2311, 2312 • ANTH 2351.....	3
Institutionally Designated Option (select one option)	
2 hours of physical activity OR PHED 1338 OR BIOL 1322 OR SPAN 2311 OR SPAN 2312.....	2-3

You've completed the Core, now complete your Associate Degree! See below:
NCTC Degree Requirements in Addition to Core Curriculum
Required Hours — 19 hours

<u>Course Designation</u>	<u>Credit Hours</u>
Proficiency with Computers (select one option):	
COSC 1400 Introduction to Computers OR pass departmental exam	4
(Additional 4 hours of elective will be required if select and pass departmental exam)	
Electives (Transfer or Recommended) needed to complete NCTC degree*	15
Associate of Arts (AA): Select one additional 3 hour course of sophomore literature	
Associate of Science (AS): Select one additional 3 hour course of college level mathematics	
Total Required Hours for an Associate Degree.....	62

NOTE: Elective selection should be based on the degree requirements for your chosen Major Field of Study at the university you wish to attend. Students should request a degree plan of their chosen Major Field of Study from the university they wish to transfer to. Designated Transfer Electives generally meet basic university degree requirements for a Major Field of Study. Designated Recommended Electives generally transfer, but they may NOT meet university Major Field of Study requirements.

**Either Transfer or Recommended electives will satisfy NCTC degree requirements.*

Individual Academic Transfer Programs Suggested Curricula Guide by Major Field of Study

Before selecting electives students should request a degree plan of their chosen Major Field of Study from the university they wish to transfer to.

IMPORTANT: Suggested Transfer Electives generally fulfill basic university elective requirements for a given Major Field of Study. Recommended Electives generally transfer, but they may not meet university elective requirements for a given Major Field of Study. Either Transfer or Recommended electives meet NCTC elective requirements for degree completion.

Major Field of Study	Credit Hours
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Agriculture

Minimum Required	62
AA Core Curriculum & Requirements.....	45-49
Recommended Electives (may not meet university major requirements):	
AGRI 1131, 1309, 1325, 1327, 1407, 1415, 1419, 2317	25

Art

Minimum Required	62
AA Core Curriculum & Requirements.....	45- 49
Transfer Electives (generally meet university major requirements):	
ARTS 1311, 1312, 1316, 1317.....	12
Recommended Electives (may not meet university major requirements):	
ARTS 1303, 1304, 2316, 2317, 2326, 2327, 2346, 2347, 2323, 2324, 2366, 2341, 2342 ...	39

Biology

Minimum Required	62
AS Core Curriculum & Requirements	45-49
Transfer Electives (generally meet university major requirements):	
BIOL 2406, 2420 • CHEM 1411, 1412	16
Recommended Electives (may not meet university major requirements):	
MATH 1572 & 2413.....	6

Business – Accounting/Economics/Finance/Management/Marketing

Minimum Required	62
AS Core Curriculum & Requirements	45-49
Transfer Electives (generally meet university major requirements):	
ACCT 2301, 2302 • ECON 2301, 2302	12
Recommended Electives (may not meet university major requirements):	
MATH 1324 & 1325.....	6

Chemistry

Minimum Required	62
AS Core Curriculum & Requirements	45-49
Transfer Electives (generally meet university major requirements):	
CHEM 2423, 2425 • MATH 2413, 2414 • PHYS2425, 2426	12

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Computer Science

Minimum Required	62
AS Core Curriculum & Requirement.....	45-49
Transfer Electives (generally meet university major requirements):	
COSC 1420, 2425	8
Recommended Electives (may not meet university major requirements):	
COSC 1430	3

Drama

Minimum Required	62
AA Core Curriculum & Requirements.....	45-49
Transfer Electives (generally meet university major requirements):	
DRAM 1310, 1351, 1352	9
Recommended Electives (may not meet university major requirements):	
DRAM 2336, 2351, 2352, 1120, 1121, 2120, 2121, 1330, 2331	19

English

Minimum Required	62
AA Core Curriculum & Requirements.....	45-49
Transfer Electives (generally meet university major requirements):	
ENGL 2322, 2323, 2332, 2333	12
Recommended Electives (may not meet university major requirements):	
Intermediate Foreign Language.....	6

Kinesiology – Physical Education

Minimum Required	62
AA Core Curriculum & Requirements.....	45-49
Recommended Electives (may not meet university major requirements):	
BIOL 1322, 2401, 2402 • PHED 1301.....	14

Social Sciences – Geography/Government/History/Pre-Law

Minimum Required	62
AA Core Curriculum & Requirements.....	45-49
Transfer Electives (generally meet university major requirements):	
HIST 2321, 2322	6
Recommended Electives (may not meet university major requirements):	
Intermediate Foreign Language.....	6

Mathematics

Minimum Required	62
AS Core Curriculum & Requirements	45-49
Transfer Electives (generally meet university major requirements)	
MATH 2413, 2414, 2415 • PHYS2425, 2426.....	20

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Music

Minimum Required 62
 AA Core Curriculum & Requirements..... 45-49
 Transfer Electives (generally meet university major requirements):
 MUSI 1311, 1312, 2311, 2312..... 12
 Recommended Electives (may not meet university major requirements):
 MUSI 1116, 1117, 1159, 1262, 1300, 1301, 1306, 1308, 1309, 2116, 2117, 2262..... 36

Physics

Minimum Required 62
 AS Core Curriculum & Requirements 45-51
 Transfer Electives (generally meet university major requirements):
 MATH 2413, 2414, 2415 • PHYS 2425, 2426..... 20

Pre-Architecture

Minimum Required 62
 AS Core Curriculum & Requirements 45-51
 Transfer Electives (generally meet university major requirements):
 MATH 2413, 2414, 2415 • PHYS 1401, 1402..... 20

Pre-Engineering

Minimum Required 62
 AS Core Curriculum & Requirements 45-51
 Transfer Electives (generally meet university major requirements):
 Mechanical/Technology Engineering: MATH 2413, 2414, 2415 • PHYS 2425, 2426 20
 Computer Science Engineering: MATH 2413, 2414, 2415 12

Pre-Medical/Pre-Dental/Pre-Veterinarian

Minimum Required 62
 AS Core Curriculum & Requirements 45-49
 Transfer Electives (generally meet university major requirements):
 BIOL 2401, 2402, 2420 • CHEM 1411, 1412, 2423, 2425 • MATH 2413
 PHYS 1401, 1402..... 40

Pre-Pharmacy

Minimum Required 62
 AS Core Curriculum & Requirements 45-49
 Transfer Electives (generally meet university major requirements):
 BIOL 2420 • CHEM 1411, 1412, 2423, 2425 • MATH 2413 • PHYS 1401, 1402..... 32

Psychology

Minimum Required 62
 AA Core Curriculum & Requirements..... 45-49
 Transfer Electives (generally meet university major requirements):
 PSYC 2301, 2314 6
 Recommended Electives (may not meet university major requirements):
 PSYC 2306, 2319, 2371 • SOCI 2319 • Intermediate Foreign Language..... 18

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Secondary Education

Minimum Required 62

NOTE: Select and follow a Major Field of Study program, specific to the subject you would like to teach (eg. Biology, English, History, Mathematics, etc.). Students should request a degree plan of their chosen Major Field of Study from the university they wish to transfer to.

Sociology

Minimum Required 62

AA Core Curriculum & Requirements..... 45-49

Transfer Electives (generally meet university major requirements):

SOCI 1301, 1306, 2319..... 9

Recommended Electives (may not meet university major requirements):

SOCI 2301, 2306, 2371 • Intermediate Foreign Language 15

Speech

Minimum Required 62

AA Core Curriculum & Requirements..... 45-49

Recommended Electives (may not meet university major requirements):

SPCH 1315, 1318, 1321 • Intermediate Foreign Language..... 18



NORTH CENTRAL TEXAS COLLEGE

Associate of Arts in Teaching

The Associate of Arts in Teaching (AAT) degree offers the first two years of classes towards initial teacher certification. This degree is approved by the Texas Higher Education Coordinating Board approved collegiate degree program consisting of lower division courses intended for transfer to baccalaureate programs that lead to initial Texas teacher certification. The degree will cover Early Childhood—Grade 8 and is fully transferable to any Texas public university. North Central Texas College has particular transfer agreements for this degree program with the University of North Texas, Texas Woman’s University and Midwestern State University. The Early Childhood—Grade 4 degree program is designed to help teacher aides who must earn college credit hours to comply with the *No Child Left Behind Act*. Substitute teachers would also benefit from the education courses offered in the degree program. For more information go to: www.theccb.state.tx.us/CTC/AAT/

The education curriculum at North Central Texas College is designed for transfer to four-year institutions. It is recommended that all students seek advisement from the university/college of their choice to determine if all courses recommended by North Central Texas College are the best choice for transfer to that institution’s College of Education.

Note: Most university teacher education programs require a 2.75 GPA. Each school also specifies a required minimum THEA score.

**EDUCATION (Early Childhood—Grade 4)
ASSOCIATE OF ARTS IN TEACHING DEGREE**

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I.....	3
HIST1301 U.S. History to 1865.....	3
MATH1314 College Algebra	3
BIOL1408 General Biology.....	4
TECA1303* Family & Community.....	3
Total Hours 16	

Second Semester	Credit Hours
ENGL1302 Composition II	3
HIST1302 U.S. History from 1865	3
SPCH1315 or 1318 Public Speaking.....	3
ARTS1301, MUSI1306, or DRAM1310	3
Behavioral Science Core.....	3
TECA1318* Health Safety and Nutrition for Young Children.....	3
Total Hours 18	

SECOND YEAR

First Semester	Credit Hours
MATH1350 Fundamentals of Math I	3
GOVT2305 American National Government	3
ENGL2332 or 2333 World Literature I or II.....	3
BIOL2406 Environmental Biology.....	4
TECA1311* Intro to Early Childhood Edu.	3
Total Hours 16	

Second Semester	Credit Hours
MATH1351 Fundamentals of Math II.....	3
TECA1354 Growth & Development of Children	3
GOVT2306 American State Local Government.	3
PHYS1415 Physical Science	4
TECA1354 Human Growth & Development of Children and Adolescents	3
Total Hours 16	
Grand Total Hours 63	

*COSC1400 Computer Science required for degree.
Departmental exam is available.*

**Required: 16 classroom observation hours. Criminal history background check applications must be completed, signed, and returned to Brenda Gordon between the date six weeks prior to the beginning of the semester and no later than the end of the first full week of class for public school settings - Corinth only.*

NOTE: Students may also complete EDUC1301 and EDUC2301 for transfer.

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NORTH CENTRAL TEXAS COLLEGE

**EDUCATION Generalist 4 — 8
ASSOCIATE OF ARTS IN TEACHING DEGREE**

FIRST YEAR

First Semester	Credit Hours
SPCH1315 Public Speaking	3
MATH1314 College Algebra	3
HIST1301 U.S. History to 1865	3
ENGL1301 Composition I	3
PHED1338 or BIOL1322 Wellness	3
Total Hours 15	

Second Semester	Credit Hours
TECA1354 Human Growth and Development of Children and Adolescents	3
HIST1302 U.S. History from 1865	3
ENGL1302 Composition II	3
PHYS1415 Physical Science	4
ARTS1301, MUSI1306, or DRAM1310	3
Total Hours 16	

SECOND YEAR

First Semester	Credit Hours
EDUC1301* Introduction to the Teaching Profession	3
GOVT2305 American National Government ...	3
ENGL2332 World Literature I	3
MATH1350 Fundamentals of Mathematics I	3
BIOL1408 General Biology	4
Total Hours 16	

Second Semester	Credit Hours
EDUC2301* Introduction to Special Populations	3
PSYC2314 Psychology	3
BIOL2406 Environmental Biology	4
MATH1351 Fundamentals of Mathematics II ...	3
GOVT2306 American State Local Government .	3
Total Hours 16	
Grand Total Hours 63	

*COSC1400 Computer Science required for degree.
Departmental exam is available.*

**Required: 16 classroom observation in the public school classrooms. Criminal history background check applications must be completed, signed, and returned to Brenda Gordon between the date six weeks prior to the beginning of the semester and the end of the first full week of class. If this requirement is not met, students will be recommended to drop the class until their field placement requirements can be met.*

For Secondary Education, see page 71.



NORTH CENTRAL TEXAS COLLEGE

Saturday College

Saturday College at North Central Texas College is designed to fit the busy lifestyle of students who want to complete a college degree. The Saturday College reflects NCTC's commitment to the education of students of diverse ages and backgrounds by allowing students to earn credits toward four degree options by attending classes only one day a week.

Courses that require class attendance will be offered outside traditional teaching hours in blocks of time on Saturday. The courses will be delivered in such a way as to concentrate the learning experience using the facilities and staff of NCTC to offer the opportunity to complete a degree in the traditional classroom setting combined with online courses.

The Saturday College classes fulfill general education requirements for the state of Texas. Many courses will transfer with full credit between and among all public state-supported institutions of higher education within the state. Special articulation agreements between NCTC and the major universities in this region ensure the student that their coursework will provide the step up to a higher degree if they wish. Students are advised to seek advisement prior to enrolling in the Saturday College so they can be assured that the courses they take meet their educational goals.

Saturday College classes will be available at NCTC's Corinth campus, 1500 North Corinth Street, Corinth, Texas. The same objectives and requirements that apply to the courses regularly taught on campus during the week also apply to Saturday College. Although the delivery methods vary, the content does not. Full-time faculty members and adjunct faculty who teach during the week also teach Saturday

College courses. By following the recommended degree plan, it is possible to complete an associate degree or an associate of applied science degree in two years.

Students must commit to going to class each weekend. Missing one class in Saturday College can put the student behind and it will be difficult to make up the missed work. Tuition and fees are the same as in the regular session credit program. Saturday College courses also use the same books as weekday credit courses. Saturday College offers a full complement of student services at the Corinth campus. Library services and open computer labs are available to weekend students.

TWO-YEAR PLAN/CYCLE FOR THE ASSOCIATE OF APPLIED SCIENCE DEGREE IN BUSINESS MANAGEMENT

The Business Management Associate of Applied Science degree is designed to articulate with four-year baccalaureate programs who offer a Bachelor of Applied Arts and Science (BAAS) degree.

A minimum of 63 semester hours is required for graduation with an Associate of Applied Science, Business Management Degree. Equivalent courses may be substituted with permission from the program faculty or designate. BUSG2380 Cooperative Education - Business General is a capstone experience and may not be substituted. It should be taken the last semester before graduation.

*Indicates online courses; Classes meet on Saturday morning from 9:00 to 11:50 a.m. and on Saturday afternoon from 1:00 p.m. to 3:50 p.m.

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NORTH CENTRAL TEXAS COLLEGE

FIRST YEAR

Fall Semester	Credit Hours
<i>(6 Credit Hours on Saturday plus Online courses)</i>	
BMGT1307 High Performance Work Teams3	
POFT1328 Business and Professional Presentations.....3	
BUSG1301 Introduction to Business*.....3	
ENGL1301 Composition I*3	
	Total Hours 12

Spring Semester	Credit Hours
<i>(6 Credit Hours on Saturday plus Online courses)</i>	
MATH1342 Elementary Statistics3	
IBUS1305 Introduction to International Business and Trade3	
POFT2312 Business Correspondence & Communication*.....3	
ENGL1302 Composition II*.....3	
BMGT2309 Leadership*.....3	
	Total Hours 15

10 Week Summer Semester	Credit Hours
<i>(Online courses only)</i>	
ARTS1301 Art Appreciation*3	
BMGT1303 Principles of Management*3	
	Total Hours 6

SECOND YEAR

First Semester	Credit Hours
<i>(6 Credit Hours on Saturday plus Online courses)</i>	
ACCT2301 Principles of Accounting I.....3	
BUSG1304 Personal Finance3	
MRKG1311 Principles of Marketing*3	
SPCH1315 Public Speaking*.....3	
	Total Hours 12

Second Semester	Credit Hours
<i>(6 Credit Hours on Saturday plus Online courses)</i>	
ACCT2302 Principles of Accounting II.....3	
BMGT1341 Business Ethics3	
ECON2301 Principles of Economics*3	
BUSG2305 Business Law/Contracts*3	
	Total Hours 12

Summer	Credit Hours
<i>(6 hours online)</i>	
BUSG2380** Cooperative Education – Business, General3	
HRPO2301 Human Resource Management* .3	
	Total Hours 6

Grand Total Hours 63

***BUSG2380 constitutes the capstone experience.*

TWO-YEAR PLAN/CYCLE FOR THE ASSOCIATE OF ARTS IN TEACHING (Early Childhood – Grade 4)

Associate of Arts in Teaching degree is designed to articulate with four-year baccalaureate programs at Midwestern State University, the University of North Texas and Texas Woman’s University.

*Indicates online courses; Classes meet on Saturday morning from 9:00 to 11:50 a.m. and on Saturday afternoon from 1:00 p.m. to 3:50 p.m.; Biology Hybrid course labs are TBA.

FIRST YEAR

Fall Semester	Credit Hours
<i>(3 Credit Hours on Saturday plus Online courses)</i>	
MATH1314 College Algebra*3	
TECA1303 Family and Community3	
PHED1338 Concepts of Physical Education*...3	
ENGL1301 Composition I*3	
ARTS1301 Art Appreciation*3	
	Total Hours 15

Spring Semester	Credit Hours
<i>(6 Credit Hours on Saturday plus Online courses)</i>	
TECA1311 Introduction to Early Childhood Education3	
MATH1350 Fundamentals of Math I.....3	
ENGL1302 Composition II*.....3	
BIOL1408 General Biology*4	
	Total Hours 13

10 Week Summer	Credit Hours
<i>(3 Credit Hours on Saturday plus Online courses)</i>	
TECA1318* Nutrition, Health, and Safety of Young Children*3	
MATH1351 Fundamentals of Math II.....3	
	Total Hours 6

SECOND YEAR

First Semester	Credit Hours
<i>(4 Credit Hours on Saturday plus Online courses)</i>	
GOVT2305 American National Government* .3	
ENGL2332 World Literature*.....3	
HIST1301 U.S. History to 1865*.....3	
PHYS1415 Physical Science.....4	
TECA1354 Growth and Development of Children and Adolescents*3	
	Total Hours 16

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Second Semester	Credit Hours
<i>(4 Credit Hours on Saturday plus Online courses)</i>	
SPCH1315 Public Speaking*	3
GOVT2306 American State Local Government*	3
BIOL2406 Environmental Biology	4
HIST1302 U.S. History from 1865*	3
Total Hours 13	

10-Week Summer	Credit Hours
<i>(3 Credit Hours on Saturday)</i>	
SOCI2319 Cultural Diversity.....	3
Total Hours 3	
Grand Total Hours 66	

*Indicates online courses

**TWO-YEAR PLAN/CYCLE FOR THE
ASSOCIATE OF ARTS OR
ASSOCIATE OF SCIENCE DEGREE**

The Associate of Arts degree and the Associates of Science degree are designed to transfer to four-year universities across the state of Texas.

*Indicates online courses; Classes meet on Saturday morning from 9:00 to 11:50 a.m. and on Saturday afternoon from 1:00 p.m. to 3:50 p.m.

FIRST YEAR

First Semester	Credit Hours
<i>(3 Credit Hours on Saturday plus Online courses)</i>	
MATH1314 College Algebra.....	3
HIST1301* U.S. History to 1865	3
ENGL1301* Composition I	3
COSC1400* Introduction to Computers	4
Total Hours 13	

Second Semester	Credit Hours
<i>(3 Credit Hours on Saturday plus Online courses)</i>	
SPCH1315 Public Speaking	3
HIST1302* U.S. History from 1865	3
ENGL1302* Composition II	3
ARTS1301* Art Appreciation	3
PHED1118* Jogging/Walking I.....	1
Total Hours 13	

10 Week Summer	Credit Hours
<i>(Biology lab meets 5 hours each Saturday for 10 weeks)</i>	
BIOL1408* General Biology	4
PHED1119* Jogging/Walking II.....	1
Total Hours 5	

SECOND YEAR

First Semester	Credit Hours
<i>(3 Credit Hours on Saturday plus online courses)</i>	
Elective	3
<i>(For Business Majors ACCT2301 Principles of Accounting I)</i>	
Elective	3
<i>(For Business Majors: ECON2301 Principles of Macroeconomics)</i>	
GOVT2305* American National Government	3
PSYC2301* Introduction to Psychology.....	3
Total Hours 12	

Second Semester	Credit Hours
<i>For Associate of Science Degree</i>	
MATH1342 Elementary Statistics	3
Plus electives.....	9

<i>For Associate of Arts Degree</i>	
ENGL2332* World Lit I.....	3
Plus electives.....	9

Note: Business Majors should take the following electives:

ACCT2302 Principles of Accounting II.....	3
MATH1342 Elementary Statistics	3
ECON2302 Principles of Microeconomics.....	3
Total Hours 12	

10 Week Summer	Credit Hours
<i>(Biology lab meets 5 hours each Saturday plus online courses)</i>	
BIOL2406 Environmental Biology	4
GOVT2306* American State Local Government.....	3
Total Hours 7	
Grand Total Hours 62	



NORTH CENTRAL TEXAS COLLEGE

Curricula – Technical

To earn either an Associate of Applied Science Degree or a Certificate, students must achieve an overall grade point average of at least 2.0 and complete the minimum number of semester hours specified for each program. Eighteen of the semester hours required for completion of the degree/certification must be taken at NCTC. Refer to each individual program section in the following pages for requirements specific to those programs. For additional information, contact the Department Chair, Program Coordinator, or the Dean of Advanced and Applied Technologies.

Award of Tech-Prep Credit

Technical graduates from area high schools may be eligible for college credit. For information, contact the Tech-Prep office at 940-668-7731, ext. 4384.

BUSINESS MANAGEMENT (Degree)

This program is designed to equip students with knowledge and skills directly applicable to a career in management or supervision, as well as to update and sharpen personal management skills. It is also aimed at providing quality workforce education for positions of managerial responsibility in business and industry. In addition to providing classroom-based course work, the College works with local and area employers to provide on-the-job training experiences to bridge the gap between theory and practice.

All students are to conduct themselves in a manner appropriate to a professionally oriented learning atmosphere. Each student is expected to respect the rights of others. Because students may be in contact with business professionals from outside the college, it is imperative that performance in and out of the classroom reflect the student's desire to become a part of the business professional community. In addition to behavior, dress in the classroom should be appropriate.

Graduation Requirements: A minimum of 63 semester hours is required for graduation with an Associate of Applied Science, Business Management Degree. Equivalent courses may be substituted with permission from the program faculty or designate. BUSG 2380 Cooperative Education – Business General is a capstone experience and may not be substituted. It should be taken the last semester before graduation.

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I	3
MATH1342 Elementary Statistics	3
BUSG1301 Introduction to Business.....	3
BMGT1307 High Performance Work Teams	3
POFT1328 Business and Professional Presentations.....	3
Total Hours 15	

Second Semester	Credit Hours
ENGL1302 Composition II.....	3
IBUS1305 Introduction to International Business and Trade.....	3
ARTS1301 Art Appreciation.....	3
BMGT1303 Principles of Management	3
BMGT2309 Leadership	3
POFT2312 Business Correspondence and Communication	3
Total Hours 18	

SECOND YEAR

First Semester	Credit Hours
SPCH1321 Business and Professional Speech ...	3
ACCT2301 Principles of Accounting.....	3
BUSG1304 Personal Finance	3
HRPO2301 Human Resources Management	3
MRKG1311 Principles of Marketing.....	3
Total Hours 15	

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Second Semester	Credit Hours
ECON2301 Principles of Economics	3
ACCT2302 Principles of Accounting II	3
BMGT1341 Business Ethics	3
BUSG2305 Business Law/Contracts	3
BUSG2380* Cooperative Education - Business, General	3
	Total Hours 15
	Grand Total Hours 63

** BUSG 2380 will constitute the capstone experience.*

BUSINESS MANAGEMENT (Certificate)

FIRST YEAR

First Semester	Credit Hours
ACCT2301 Principles of Accounting I	3
BUSG1304 Personal Finance	3
HRPO2301 Human Resource Management	3
BUSG1301 Introduction to Business	3
BMGT1307 High Performance Work Teams	3
	Total Hours 15

Second Semester	Credit Hours
ACCT2302 Principles of Accounting II	3
POFT2312 Business Correspondence & Communication.....	3
IBUS1305 Intro to International Business & Trade.....	3
BMGT1303 Principles of Management	3
BMGT2309 Leadership	3
BUSG2380* Cooperative Education - Business, General	3
	Total Hours 18
	Grand Total Hours 33

** BUSG 2380 will constitute the capstone experience.*

COMPUTER INFORMATION SYSTEMS & TECHNOLOGY (Degree)

The Computer Information Systems and Technology (CITE) curriculum is designed to prepare students for a variety of careers related to the use of computer technology. The program tracks specifically target existing occupational areas which are forecast by regional planning agencies to be

growing occupational areas.

The objectives of the CITE program include preparing students to become employable through training in the occupational area; providing adequate information, learning opportunities, and hands-on practice to become proficient in using computer applications and hardware; providing professional guidance and ethical foundation for using computer information and software appropriately; and providing access to a variety of hardware, software, and telecommunications tools to achieve workplace competencies.

Prerequisite: Students in this program must be able to keyboard at a minimum rate of 30 words per minute (wpm) and they will be required to take a keyboarding test to verify that they meet this requirement. Those who cannot meet this requirement are advised to take a keyboarding class to improve their skills PRIOR to applying for admission to the program.

Graduation Requirements: A minimum of 62 semester hours is required for graduation with an Associate of Applied Science Degree in computer Information Systems and Technology.

FIRST YEAR

First Semester	Credit Hours
POFI2301 Word Processing.....	3
ITSC1305 Intro to PC Operating Systems	3
ITSW1310 Intro to Presentation Graphic Software.....	3
IMED1316 Web Pge Design I	3
ITNW1337 Intro to the Internet.....	3
	Total Hours 15

Second Semester	Credit Hours
MATH1314 College Algebra OR MATH1332 College Mathematics ..	3
ARTS1301 Art Appreciation OR MUSI1306 Music Appreciation	3
GAME1343 Game and Simulation Programming	3
ITSE1302 Computer Programming.....	3
POFI1349 Spreadsheets.....	3
	Total Hours 15

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SECOND YEAR

First Semester		Credit Hours
GRPH1359	Object Oriented Computer Graphics	3
ENGL1301	Composition I	3
ITSC1315	Project Management Applications..	3
ITSW1307	Introduction to Database.....	3
ITSC1325	Personal Computer Hardware.....	3
GOVT2305	American National Government	3
		Total Hours 18

Second Semester		Credit Hours
ITSC2331	Integrated Software Application III.	3
EECT1300	Technical Customer Service	3
SPCH1321	Business and Professional Speaking.	3
ITSE2302	Intermediate Web Programming	3
ITSC2280*	Cooperative Education	2
		Total Hours 14
		Grand Total Hours 62

**ITSC2280 will constitute the capstone experience.*

COMPUTER INFORMATION SYSTEMS & TECHNOLOGY (Certificate)

A minimum of 32 hours is required for graduation with a certificate in Computer Information Systems and Technology.

First Semester		Credit Hours
GRPH1359	Object Oriented Computer Graphics	3
IMED1316	Web Page Design I.....	3
ITNW1337	Introduction to the Internet.....	3
ITSW1307	Introduction to Database.....	3
ITSC1325	Personal Computer Hardware.....	3
		Total Hours 15

Second Semester		Credit Hours
GAME1343	Game and Simulation Programming	3
ITSE1302	Computer Programming.....	3
EECT1300	Technical Customer Service.....	3
ITSE2302	Intermediate Web Programming	3
ITSC2280*	Cooperative Education	2
		Total Hours 14
		Grand Total Hours 29

**ITSC2280 will constitute the capstone experience.*

**NETWORKING TECHNOLOGY (Degree)
Network Operating Systems Major
Corinth Campus Only**

Graduation Requirements: A minimum of 61 semester hours is required for graduation with an Associate of Applied Science Degree in Networking Technology.

Prerequisite: Students in this program must be able to keyboard at a minimum rate of 30 words per minute (WPM). Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to enrollment.

FIRST YEAR

First Semester		Credit Hours
COSC1400	Introduction to Computers	4
POFI2301	Word Processing.....	3
ITNW1325	Fundamentals of Networking Technology.....	3
GOVT2305	American National Government	3
ITNW1308	Implementing & Supporting Client Operating Systems	3
		Total Hours 16

Second Semester		Credit Hours.
MATH1314	College Algebra OR MATH1332 College Mathematics...	3
ARTS1301	Art Appreciation OR MUSI1306 Music Appreciation	3
ITNW1354	Implementing and Supporting Servers	3
ENGL1301	Composition I.....	3
ITNW2304	Implementing, Managing, and Maintaining a Microsoft Windows 2003 Environment.....	3
		Total Hours 15

SECOND YEAR

First Semester		Credit Hours
SPCH1321	Business and Professional Speaking	3
ITSC1325	Personal Computer Hardware.....	3
ITCC1402	CCNA 1: Networking Basics.....	4
ITCC1406	CCNA 2: Router and Routing Basics	4
		Total Hours 14

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Second Semester	Credit Hours
ITCC1442 CCNA 3: Switching Basic and Intermediate Routing.....	4
ITCC1446 CCNA 4: Wide Area Network (WAN) Technologies	4
ITSY1342 Information Technology Security ...	3
EECT1300 Technical Customer Service	3
ITSC2280* Cooperative Education	2
Total Hours 16	
Grand Total Hours 61	

**ITSC2280 will constitute the capstone experience.*

**NETWORKING TECHNOLOGY (Certificate)
Network Operating Systems Major
Corinth Campus Only**

A minimum of 31 hours is required for graduation with a certificate in Networking Technology.

First Semester	Credit Hours
COSC1400 Intro to Computers	4
ITSC1325 Personal Computer Hardware.....	3
ITNW1325 Fundamentals of Networking Technology.....	3
SPCH1321 Business & Professional Speaking ...	3
ITNW1308 Implementing & Supporting Client Operating Systems	3
Total Hours 16	

Second Semester	Credit Hours
BMGT1341 Business Ethics	3
ITSY1342 Information Technology Security ...	3
ITNW1354 Implementing and Supporting Servers	3
EECT1300 Technical Customer Service	3
ITNW2304 Implementing, Managing, and Maintaining a Microsoft Windows 2003 Environment.....	3
Total Hours 15	
Grand Total Hours 31	

Capstone for this course will consist of passing comprehensive departmental exams, or actual work experience.

**NETWORKING TECHNOLOGY (Certificate)
CISCO Major
Gainesville & Corinth Campuses**

A minimum of 32 hours is required for graduation with a certificate in Computer Information Systems and Technology.

First Semester	Credit Hours
COSC1400 Intro to Computers	4
ITSC1325 Personal Computer Hardware.....	3
ITNW1333 Microsoft Networking Essentials	3
ITCC1402 CCNA 1: Networking Basics.....	4
ITCC1406 CCNA 2: Router and Routing Basics	4
Total Hours 18	

Second Semester	Credit Hours
ITNW1354 Implementing and Supporting Servers	3
ITSY1342 Information Technology Security ...	3
ITCC1442 CCNA 3: Switching Basic and Intermediate Routing.....	4
ITCC1446 CCNA 4: Wide Area Network (WAN) Technologies	4
Total Hours 14	
Grand Total Hours 32	

Capstone for this course will consist of passing comprehensive departmental exams, or actual work experience.

**COSMETOLOGY (Certificate)
Gainesville Campus**

The NCTC Cosmetology program's curriculum is mandated by the Texas Department of Licensing and Regulations and prepares students for licensure by this commission as either a stylist/operator, esthetician/facialist, or through continued study, an instructor.

Fifteen of the semester hours required for completion of the degree/certification must be taken at North Central Texas College.

The following are required for certification:

FIRST YEAR

First Semester	Credit Hours
CSME1401 Orientation to Cosmetology.....	4
CSME1405 Fundamentals of Cosmetology.....	4
CSME1410 Intro to Haircutting & Related Theory	4
CSME1453 Chemical Reformation & Related Theory	4
Total Hours 16	

Second Semester	Credit Hours
CSME2401 Principles of Hair Coloring & Related	4
CSME2410 Intermediate Haircutting & Related	4
CSME1451 Artistry of Hair, Theory, & Practice	4
CSME2443 Salon Development.....	4
Total Hours 16	

Summer Semester	Credit Hours
CSME2237 Advanced Cosmetology Techniques	2
CSME2439 Advanced Hair Design	4
CSME2441* Prep for Texas Cosm. Comm. Exam	4
Total Hours 10	
Grand Total Hours 42	

**CSME2441 will constitute the capstone experience.*

**COSMETOLOGY INSTRUCTOR
(Certificate)**

The following are required for certification:

FIRST YEAR

First Semester	Credit Hours
CSME1534 Cosmetology Instructor I.....	5
CSME1535 Orientation to the Instruction of Cosmetology	5
Total Hours 10	

Second Semester	Credit Hours
CSME2514 Cosmetology Instructor II.....	5
CSME2545 Instructional Theory & Clinic Oper.	5
Total Hours 10	

Summer Semester	Credit Hours
CSME2415* Cosmetology Instructor III	4
Grand Total Hours 24	

**CSME2415 will constitute the capstone experience.*

ESTHETICIAN (Certificate)

The following are required for certification:

Fall Semester	Credit Hours
CSME1520 Orientation to Facial Specialist.....	5
CSME1348 Principles of Skin Care	3
CSME1521* Principles of Facial/Esthetics Technology.....	5
Total Hours 13	

Spring Semester	Credit Hours
CSME1547 Principles of Skin Care/Facials & Related Theory	5
CSME1545 Principles of Facial/Esthetics Technology II	5
CSME2531* Principles of Facial/Esthetics Technology III	5
Total Hours 15	
Grand Total Hours 28	

**CSME2531 will constitute the capstone experience.*

**DRAFTING TECHNOLOGY (Degree)
Gainesville Campus**

Graduation Requirements: A minimum of 64 semester hours is required for graduation with an Associate of Applied Science Degree (Equivalent courses may be substituted for any of the classes below with permission from the program faculty or designate).

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I.....	3
COSC1400 Intro to Computers	4
DFTG1305 Technical Drafting	3
ARTV1302 Intro to Technical Animation and Rendering.....	3
DFTG2317 Descriptive Geometry	3
Total Hours 16	

Second Semester	Credit Hours
ENGL1302 Composition II.....	3
MATH1314 College Algebra	3
DFTG1317 Architectural Drafting – Residential	3
DFTG1309 Basic Computer-Aided Drafting.....	3
DFTG2302 Machine Drafting.....	3
Total Hours 15	

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SECOND YEAR

First Semester	Credit Hours
SPCH1315 Public Speaking	3
DFTG2319 Intermed. Computer-Aided Drafting	3
DFTG1358 Electrical/Electronics Drafting	3
DFTG2306 Machine Design	3
DFTG2358 Advanced Machine Design	3
DFTG2300 Intermed. Architect. Drafting-Resident.	3
Total Hours 18	

Second Semester	Credit Hours
GOVT2305 American National Government	3
DFTG2340 Solid Modeling/Design	3
DFTG2332 Adv. Computer-Aided Drafting.....	3
DFTG2335 Advanced Tech. in Mech. Design & Drafting	3
DFTG2359* Technical Illustration & Technical Presentations	3
Total Hours 15	
Grand Total Hours 64	

**DFTG2359 will constitute the capstone experience.*

DRAFTING TECHNOLOGY (Certificate)

The following are required for certification.

FIRST YEAR

First Semester	Credit Hours
DFTG1309 Basic Computer-Aided Drafting.....	3
COSC1400 Intro to Computers	4
DFTG1305 Technical Drafting	3
DFTG2317 Descriptive Geometry	3
Total Hours 13	

Second Semester	Credit Hours.
DFTG2340 Solid Modeling/Design	3
DFTG1317 Architect. Drafting – Residential.....	3
DFTG2319 Intermediate Computer-Aided Drafting	3
DFTG2306 Machine Design	3
DFTG2302 Machine Drafting.....	3
Total Hours 15	
Grand Total Hours 28	

** Note: To qualify for the Certificate in Drafting Technology, the student must pass a comprehensive exam. This exam constitutes the capstone experience.*

EQUINE SCIENCE (Degree)

Gainesville Campus

Important Notice: Due to the program's special nature (as well as to the limited availability of facilities) enrollment may be limited. Students are urged to apply early, and late applicants will be considered on a space available basis. Also: (1) students must be officially accepted for admission by the college, and (2) students must have sufficient physical strength to meet the rigorous demands of the program and of caring for animals. Additional departmental requirements may apply and should be obtained from program or division faculty.

Graduation Requirements: A minimum of 66 semester hours is required for graduation with an Associate of Applied Science Degree. (Equivalent courses may be substituted for any of those below with permission from the program faculty or designate).

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I	3
AGEQ1319 Horsemanship I.....	3
AGEQ1411 Equine Science I.....	4
BIOL1408 General Biology OR 1413.....	4
Humanities/Visual & Performing Arts..	3
(select from list on pg. 67)	
Total Hours 17	

Second Semester	Credit Hours
AGEQ1315 Horse Evaluation I.....	3
AGEQ1305 Enterprise Management.....	3
AGRI2317 Intro to Ag Economics	3
ENGL1302 Composition II.....	3
GOVT2305 American National Govt.....	3
Total Hours 15	

SECOND YEAR

First Semester	Credit Hours
AGRI1309 Computer in Ag	3
AGEQ2310 Equine Business Management	3
AGAH1443 Animal Health	4
AGEQ1401 Equine Behavior and Training I.....	4
Total Hours 14	

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Second Semester	Credit Hours
AGEQ1450 Equine Reproduction	4
Approved Equine Elective	4
AGEQ2311 Equine Science II	3
MATH1314 College Algebra	3
SPCH1315 Public Speaking	3
Total Hours	17

Summer	Credit Hours
AGEQ2386* Internship	3
Total Hours	3
Grand Total Hours	66

**AGEQ2386 will constitute the capstone experience.*

**EQUINE SCIENCE – HORSE
MANAGEMENT & TRAINING (Certificate)**

The following are required for certification.

First Semester	Credit Hours
AGEQ1319 Horsemanship I	3
AGEQ1411 Equine Science I	4
AGEQ2310 Equine Business Management	3
AGEQ1401 Equine Behavior & Training I	4
Total Hours	14

Second Semester	Credit Hours
AGEQ1305 Enterprise Management	3
AGEQ1315 Horse Evaluation I	3
AGEQ2311 Equine Science II	3
Equine Elective	4
AGEQ1450 Equine Rreproduction	4
Total Hours	17

Summer Semester	Credit Hours
AGEQ2386* Internship	3
Total Hours	3
Grand Total Hours	34

**AGEQ2386 will constitute the capstone experience.*

**EQUINE SCIENCE – BREEDING
FARM MANAGEMENT (Certificate)**

The following are required for certification.

First Semester	Credit Hours
AGRI1309 Computer in Ag	3
AGEQ2310 Equine Business Management	3
AGEQ1411 Equine Science I	4
AGEQ1401 Equine Behavior & Training I	4
AGCR1441 Pasture Management	4
Total Hours	18

Second Semester	Credit Hours
AGEQ1315 Horse Evaluation I	3
AGEQ1305 Equine Enterprise Management	3
AGEQ1450 Equine Reproduction	4
AGEQ2311 Equine Science II	3
Approved Equine Elective	4
Total Hours	17

Summer Semester	Credit Hours.
AGEQ2386* Internship	3
Total Hours	3
Grand Total Hours	38

**AGEQ2386 will constitute the capstone experience.*

**EQUINE SCIENCE ELECTIVES
Select from the list below:**

EQUINE SCIENCE	
AGEQ1291 Special Topics II	
AGEQ1391 Special Topics III	
AGEQ2215 Horse Evaluation II	
AGEQ2239 Horsemanship II	
AGEQ1271 Fundamentals of Riding Instruction	
AGEQ1271 Reining	
AGEQ2401 Behavior and Training II	

FARM & RANCH MANAGEMENT (Degree)
Gainesville Campus

Graduation Requirements: A minimum of 63 semester hours is required for graduation with an Associate of Applied Science Degree. (Equivalent courses may be substituted for any of the classes below with permission from the program faculty or designate).

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I.....	3
AGRI1131 The Agriculture Industry.....	1
AGRI1419 Animal Science.....	4
AGRI1407 Agronomy	4
AGAH1443 Animal Health.....	4
Electives.....	3
Total Hours	18

Second Semester	Credit Hours
MATH1332 College Mathematics	3
AGRI2317 Agricultural Economics.....	3
AGAH2313 Feeds and Feeding.....	3
AGCR1419 Soil Science.....	4
SPCH1315 Public Speaking.....	3
Total Hours	16

SECOND YEAR

First Semester	Credit Hours
GOVT2306 Amer. State & Local Govt. or GOVT2305 Amer. Natl. Govt.....	3
AGRI1309 Computers in Agriculture	3
AGCR1441 Pasture Management.....	4
AGCR2401 Agriculture Chemicals.....	4
Elective	2
Total Hours	16

Second Semester	Credit Hours
Humanities/Fine Art elective from list	3
AGRI1325 Marketing of Agriculture Products..	3
AGMG2480*Cooperative Education	4
Elective	3
Total Hours	13
Grand Total Hours	63

**AGMG2480 will constitute the capstone experience.*

AGRICULTURE MANAGEMENT (Certificate*)

The following are required for certification. (Equivalent courses may be substituted for any of the classes below with permission from the program faculty or designate.)

First Semester	Credit Hours
AGRI1309 Computers in Agriculture	3
AGRI1419 Animal Science.....	4
AGRI1407 Agronomy	4
AGCR1441 Pasture Management.....	4
AGAH1443 Animal Health	4
Total Hours	19

Second Semester	Credit Hours
AGRI1131 The Agriculture Industry.....	1
AGRI1325 Marketing of Agriculture Products..	3
AGRI2317 Agriculture Economics.....	3
AGAH2313 Feeds and Feeding.....	3
AGCR1419 Soil Science.....	4
AGMC2401 Agriculture Chemicals.....	4
Total Hours	18

Summer Semester	Credit Hours
AGMG2480*Cooperative Education	4
Total Hours	4
Grand Total Hours	41

**AGMG2480 will constitute the capstone experience.*

FARM AND RANCH ELECTIVES

Select from list below:

FARM AND RANCH MANAGEMENT:

- AGAH1453 Beef Cattle Management
- AGAH2270 Artificial Insemination
- AGCR1470 Environmental Agriculture
- AGMG2301 Ranch Business
- AGME1449 Farm Power & Machinery
- RELE1331 Farm & Ranch Real Estate

AGRICULTURE:

- AGRI2221 Livestock Judging
- AGRI1311 Dairy Science
- AGRI1415 Horticulture
- AGRI1327 Poultry Science
- AGRI2301 Farm Shop
- AGRI2330 Wildlife Conservation & Mgmt.

HUMANITIES/VISUAL & PERFORMING ARTS:

(select from list on pg. 67)

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**HORTICULTURAL MANAGEMENT
(Certificate)**

The following are required for certification: (Equivalent courses may be substituted for any of the classes below with permission from the program faculty or designate.) Some courses may have an additional supply fee charged at the time of registration.

First Semester	Credit Hours
FMKT1301 Floral Design	3
HALT1325 Landscape Plant Material	3
AGRI1415 Horticulture.....	4
AGCR2401 Agriculture Chemicals.....	4
Horticulture Elective	3
Total Hours 17	

Second Semester	Credit Hours
HALT1422 Landscape Design.....	4
HALT2308 Greenhouse Management.....	3
AGRI1131 The Agriculture Industry.....	1
AGCR1419 Soil Science.....	4
Horticulture Elective	3
Total Hours 15	

Summer Semester	Credit Hours
HALT2480* Cooperative Education	4
Total Hours 4	
Grand Total Hours 36	

**HALT2480 will constitute the capstone experience.*

HORTICULTURE ELECTIVES

Select from list below:

HALT1309 Interior Plants	3
HALT1353 Landscape Computer Design	3
HALT1370 Naturalistic Gardening.....	3
HALT2302 Greenhouse Crop Production...	3
HALT2307 Food Crops	3

**GRAPHIC ARTS
(Marketable Skills Achievement Award)**

A “marketable skills achievement award” is an institutional award given to students who complete a prescribed series of courses preparing them for employability in a specialized field. It also can meet the needs of students seeking to acquire new

or additional job skills to qualify for advancement in an existing position.

This particular program is designed for students who enjoy incorporating their artistic skills and talent with computer technology and who seek a credential which can enhance their employability in a related occupation. Job opportunities are widely varied and exist in areas ranging from newspaper and magazine publishing, commercial printing, advertising and sign making to web page design, electronic photo retouching and corporate public relations.

Students are helped to develop identifiable proficiencies in certain popular, industry standard computer-based graphic arts and web authoring software programs such as Macromedia Fireworks®, Macromedia Flash® and Macromedia Dreamweaver®.

The award is given upon completion of the following:

Courses	Credit Hours
IMED1316 WEB Page Design I	3
ITSE1359 Intro to Scripting Languages.....	3
GRPH1359 Object Oriented Computer Graphics	3
ITSW1310 Introduction to Presentation Graphics	3
ITSE2302 Intermediate Web Programming	3
Total Hours 15	

LAW ENFORCEMENT (Degree)

Graduation Requirements: A minimum of 64 semester hours is required for graduation with an Associate of Applied Science Degree.

Law Enforcement is an enjoyable and rewarding career with a variety of job opportunities. Students seeking a degree in this area will receive exceptional preparation for employment in the fields of **law enforcement, corrections, probation/parole, forensics and investigation.**

NOTE: NCTC will grant nine (9) law enforcement credit hours to students who meet the following requirements: complete a Texas Certified Police Academy; pass the State Licensing Exam for Texas Peace Officers; and complete twelve (12) credit hours of Law Enforcement courses at North Central

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NORTH CENTRAL TEXAS COLLEGE

Texas College. Credit will be given for the following courses: CJSA1342 Criminal Investigation and six (6) hours of Law Enforcement electives. Credit is awarded only when proper documentation is presented to the Law Enforcement Department.

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I	3
COSC1400 Intro to Computers	4
CRIJ1301 Intro to Criminal Justice	3
CJSA1348 Ethics in Criminal Justice	3
CJSA1317 Juvenile Justice System	3
Total Hours 16	

Second Semester	Credit Hours
ENGL1302 Composition II	3
MATH1314 College Algebra	3
CJSA1342 Criminal Investigation	3
CRIJ1306 Court System and Practices	3
Any Criminal Justice elective.....	3
Total Hours 15	

SECOND YEAR

First Semester	Credit Hours
SPCH1315 Public Speaking	3
SOCI1301 Intro to Sociology	3
CRIJ2313 Correctional System & Practices.....	3
CRIJ2328 Police Systems & Practices	3
ENGL2311 Technical Writing.....	3
Total Hours 15	

Second Semester	Credit Hours
GOVT2305 American National Government ...	3
PSYC2301 Intro to Gen. Psychology	3
CRIJ1310 Fundamentals of Criminal Law	3
CJSA2334 Contemporary Issues in Criminal Justice	3
CJSA1325 Criminology	3
Any Criminal Justice elective.....	3
Total Hours 18	
Grand Total Hours 64	

**CJSA2334 will constitute the capstone experience.*

LAW ENFORCEMENT ELECTIVES

Select from list below:

CJLE1327	Interviewing & Report Writing
CJSA2300	Legal Aspect of Law Enforcement
CJSA1308	Criminalistics
CJCR1304	Probation and Parole
CJSA1393	Introduction to Forensics

OFFICE SYSTEMS TECHNOLOGY (Degree)

The Office Systems Technology (OST) curriculum is designed to prepare students for a variety of careers related to office technology and to update and sharpen current skills. The program's flexibility allows the student to take classes over the Internet while continuing to work full-time. It is designed to equip students with the knowledge and skills directly related to their career and specifically targets existing occupational areas that are forecast by regional planning agencies to be growing ones.

The objectives of the OST program include preparing students to become employable through training in the occupational area; providing adequate information, learning opportunities, and hands-on practice to become proficient in using computer applications and office machines; and providing professional guidance and ethical foundations for the office environment.

Prerequisite: Use of the computer is essential for success in this program. Students enrolled in OST classes must be able to keyboard at a minimum rate of 30 words per minute (wpm), and they will be required to take a keyboarding test to verify that they meet this requirement. Those who cannot meet this requirement must take a keyboarding class to improve their skills prior to or concurrent with enrollment.

Graduation Requirements: A minimum of 63 semester hours is required for graduation with an Associate of Applied Science Degree in Office Systems Technology.

FIRST YEAR

First Semester	Credit Hours
ENGL1301 Composition I.....	3
COSC1400 Introduction to Computers	4
POFT1329 Keyboarding & Document Formatting	3
POFI2301 Word Processing.....	3
ACNT1303 Intro to Accounting I	3
Total Hours 16	

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Second Semester	Credit Hours
POFI1349 Spreadsheets.....	3
ENGL1302 Composition II.....	3
ACNT1304 Introduction to Accounting II	3
POFT2312 Business Correspondance and Communication.....	3
POFI2331 Desktop Publishing for the Office .	3
Total Hours	15

SECOND YEAR

First Semester	Credit Hours
ITSW1307 Intro to Database	3
POFT1309 Administrative Office Procedures I. 3	3
MATH1332 College Mathematics OR	
MATH1314 College Algebra	3
POFT1328 Business and Professional Presentations.....	3
POFT1331 Business Machine Applications	3
Total Hours	15

Second Semester	Credit Hours
SPCH1321 Business & Professional Speech OR	
SPCH1318 Interpersonal Communication.....	3
ARTS1301 Art Appreciation OR	
MUSI1306 Music Appreciation.....	3
ECON2301 Principles of Economics (Macro) ...	3
POFT1325 Business Math & Machine Application	3
POFT1319 Records and Information Management	3
POFT2280* Cooperative Education	2
Total Hours	17
Grand Total Hours	63

**POFT2280 will constitute the capstone experience.*

**OFFICE SYSTEMS TECHNOLOGY
(Certificate)**

Graduation Requirements: A minimum of 36 hours is required for graduation with a certificate of completion in Office Systems Technology.

First Semester	Credit Hours
POFT1329 Keyboarding and Document Formatting	3
POFT1309 Administrative Office Procedures I. 3	3
POFT1328 Business and Professional Presentations.....	3
ACNT1303 Introduction to Accounting I	3
POFT1331 Business Machine Applications	3
POFI2301 Word Processing.....	3
Total Hours	18

Second Semester	Credit Hours
POFT2312 Business Correspondence and Communication.....	3
ACNT1304 Introduction to Accounting II	3
POFI1349 Spreadsheets	3
POFI2331 Desktop Publishing for the Office .	3
POFT1325 Business Math & Machine Application	3
POFT1319 Records and Information Management	3
Total Hours	18
Grand Total Hours	36

A comprehensive department exam will constitute the capstone experience.

**MEDICAL OFFICE SYSTEMS
TECHNOLOGY (Certificate)**

Graduation Requirements: A minimum of 35 hours is required for graduation with a certificate of completion in Office Systems Technology.

**(Prior approval required before registration.
Orientation required. Contact Coordinator for instructions).*

First Semester	Credit Hours
POFT1329 Keyboarding and Document Formatting	3
POFI3201 Word Processing.....	3
POFT1309 Administrative Office Procedures I. 3	3
ACNT1303 Introduction to Accounting I	3
POFT1331 Business Machine Applications	3
SRGT1201 Medical Terminology*.....	2
Total Hours	17

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Second Semester	Credit Hours
POFI1349 Spreadsheets.....	3
ACNT1304 Introduction to Accounting II.....	3
POFI2312 Business Correspondence & Communication	3
POFM1327 Medical Insurance.....	3
POFT1325 Business Math & Machine Application.....	3
POFT1319 Records and Information Management	3
	Total Hours 18
	Grand Total Hours 35

A comprehensive department exam will constitute the capstone experience.

**PRODUCTION TECHNOLOGY
PRECISION MACHINING (Certificate)**

Gainesville Campus

Machining and manufacturing courses provide students with the highest level of education using equipment and technologies used in the machining industry. The program is committed to providing technical training for any student wishing to attain entry-level employment or needing to upgrade skill levels.

First Semester	Credit Hours
MCHN1338 Machine Shop I.....	3
DFTG1325 Blueprint Reading and Sketching ...	3
MCHN1343 Machine Shop Mathematics	3
	Total Hours 9

Second Semester	Credit Hours
MCHN1305 Metals and Heat Treatment.....	3
INMT1345 Computer Numerical Controls.....	3
MCHN1341 Machine Shop II.....	3
	Total Hours 9

Summer Semester	Credit Hours
MCHN1480**Cooperative Education — Machinist/Machine Technologist... 4	4
	Total Hours 4
	Grand Total Hours 22

***MCHN1480 will constitute the capstone experience.*

**PRODUCTION TECHNOLOGY
COMPUTER-AIDED MANUFACTURING
(Certificate)**

Gainesville Campus

First Semester	Credit Hours
INMT1343 CAD-CAM I	3
INMT1345 Computer Numerical Controls	3
MCHN1343 Machine Shop Mathematics	3
	Total Hours 9

Second Semester	Credit Hours
INMT2334 NC/CNC Programming.....	3
INMT2355 CAD-CAM II.....	3
	Total Hours 6

Summer Semester	Credit Hours
INMT1480**Cooperative Education — Manufacturing Technology/ Technician.....	4
	Total Hours 4
	Grand Total Hours 19

***INMT1480 will constitute the capstone experience.*

*For more information
about Technical Programs contact the
Dean of Advanced and Applied Technologies
940-668-4214*