

Technical **Programs**

San Jacinto Community

College District

Technical Programs

At San Jacinto College, students with specific career goals may earn associate of applied science (A.A.S.) degrees as preparation for careers in a wide variety of technical fields, or they may earn technical certificates as preparation for entry-level employment in the shortest time possible.

Credits earned in technical courses are generally not transferable to other colleges or universities. Students should carefully study and follow the degree or certificate program requirements of whatever technical field they choose at the College.

Technical Programs

Major Codes	Technical Programs
3ACNT	Accounting A.A.S.
4ACNT	Accounting Certificate of Technology
6ACNT	Accounting Occupational Certificate
4AERO-DSP	Aero Technology-Aircraft Dispatcher Certificate of Technology
3AERO-MNT	Aero Technology-Aircraft Maintenance Management A.A.S.
3AERO-MGT	Aero Technology-Aviation Management A.A.S.
4AERO-PLT	Aero Technology-Career Pilot Certificate of Technology
3AERO-PDP	Aero Technology-Pilot Development Program A.A.S.
4AERO-PDP	Aero Technology-Pilot Development Program Certificate of Technology
3AIRC	Air Conditioning Technology A.A.S.
4AIRC	Air Conditioning Certificate of Technology
6AIRC	Air Conditioning Occupational Certificate
4AIRC-COMM	Air Conditioning-Commercial & Industrial Certificate of Technology
6ACRT-AST	Auto Collision Repair Assistant Occupational Certificate
4ABCR-CR	Auto Collision Repair Technology Certificate of Technology
3ABCR-MGT	Auto Collision Repair Management Specialty A.A.S.
4ABCR-MGT	Auto Collision Repair Management Specialty Certificate of Technology
4ABCR-NC	Auto Collision Repair Non-Collision Certificate of Technology
3ABDR-CR	Auto Collision Repair Technology A.A.S.
6ACRT-PNT	Automotive Painting Occupational Certificate
3AUTO	Auto Technology A.A.S.
4AUTO	Automotive Certificate of Technology
3AUTO-C	Automotive Technology-Daimler Chrysler A.A.S.
3AUTO-F	Auto Technology-Ford A.A.S.
6AUTO-F	Auto Technology Ford Maintenance & Light Repair Occupational Certificate
3AUTO-G	Auto Technology-GM A.A.S.
3AUTO-H	Auto Technology-Honda A.A.S.
4AUTO-H	Automotive-Honda Certificate of Technology
4AUTO-HM	Automotive-Honda Maintenance Certificate of Technology
4AUTO-MCN	Automotive-Machinist Certificate of Technology
4AUTO-MLR	Automotive-Maintenance & Light Repair Certificate of Technology

Major Codes	Technical Programs
3AUTO-T	Auto Technology-Toyota A.A.S.
4AUTO-T	Automotive-Toyota Certificate of Technology
4AUTO-UC	Automotive-Under Car Certificate of Technology
4AUTO-UH	Automotive-Under Hood Certificate of Technology
3BMGT-ENTR	Business Management-Small Business Entrepreneur A.A.S.
4BMGT-ENTR	Business Mgmt-Small Business Entrepreneur Certificate of Technology
3BOFT-EXE	Business Office Technology Administrative Assistant A.A.S.
3BMGT-MGMT	Business Management-Management A.A.S.
4BMGT-MGMT	Business Management-Management Certificate of Technology
6BMGT-MGMT	Business Management-Management Occupational Certificate
6BMGT-MRKG	Business Management-Foundations of Marketing Occupational Certificate
MBMGT-MGMT	Business Management-Management Marketable Skills Achievement Award
MBOTA	Business Office Technology Accounting Marketable Skills Achievement Award
6BOFT-CL	Business Office-General Clerk Occupational Certificate
4BOFT-E	Business Office Technology Executive/Administrative Certificate of Technology
4BOFT-L	Business Office Technology Legal Administrative Certificate of Technology
3BOFT-LGL	Business Office Technology Legal Administrative A.A.S.
3BOFT-M	Business Office Technology Medical Administrative A.A.S.
4BOFT-M	Business Office Technology Med Administrative Certificate of Technology
4BOFT-SW	Business Office Technology Business Software Specialty Certificate of Technology
MBOTC	Business Office Technology Computer Applications Marketable Skills Achievement Award
MBOTG	Business Office Technology General Office Marketable Skills Achievement Award
MBOTL	Business Office Technology Legal Secretary Marketable Skills Achievement Award
6CHID-ADM	Child Care-Administrative Occupational Certificate
6CHID-DIR	Child Development-Directors Occupational Certificate

Technical Programs

Major Codes	Technical Programs
3CHID-ECE	Child Development/Early Child Education A.A.S.
4CHID-ECE	Child Development/Early Child Education Certificate of Technology
4CHID-TA	Child Development-Teachers Aide Certificate of Technology
MCHID	Child Development & Family Studies Marketable Skills Achievement Award
MCHID-CUR	Child Development Curriculum Specialist Marketable Skills Achievement Award
MCHID-PC	Child Development Parent/Child Specialist Marketable Skills Achievement Award
6IT-AC	Computer Information Technology-Advanced Network CISCO Occupational Certificate
6IT-ADA	Computer Information Technology-Advanced Database Administrator Occupational Certificate
6IT-AITS	Computer Information Technology-Advanced Information Technology Security Occupational Certificate
6IT-AMS	Computer Information Technology-Advanced Network Administration Microsoft Specialty Occupational Certificate
3IT-APPL	Computer Information Technology-Applications Program A.A.S.
4IT-APPL	Computer Information Technology-Applications Program Certificate of Technology
6IT-BC	Computer Information Technology-Begin Network CISCO Occupational Certificate
6IT-BMS	Computer Information Technology-Begin Network MS Occupational Certificate
6IT-CHS	Computer Information Technology-Comp Hardware Sup Occupational Certificate
4IT-DBD	Computer Information Technology-Database Design Certificate of Technology
3IT-DSMN	Computer Information Technology-Desktop Sup/MS Network A.A.S.
4IT-DSMN	Computer Information Technology-Desktop Sup/MS Network Certificate
6IT-ECOM	Computer Information Technology-E Comm/ Web Page Design Occupational Certificate
3IT-ITS	Computer Information Technology-Info Technology Security A.A.S.
4IT-ITS	Computer Information Technology-Information Technology Security Certificate of Technology
4IT-GAMS	Computer Information Technology-Simulation & Game Design Certificate of Technology
6IT-GAME	Computer Information Technology-Introduction Game Design & Development Occupational Certificate

Major Codes	Technical Programs
3IT-NW-C	Computer Information Technology-Network Administrative-Cisco A.A.S.
4IT-NW-C	Computer Information Technology-Network Administrative-CISCO Certificate of Technology
6IT-PROG	Computer Information Technology-Programming Core Occupational Certificate
6IT-WDCS-C	Computer Information Technology-Web, Desktop, CISCO, Security Core Occupational Certificate
4IT-WBDI	Computer Information Technology-Web Design/Implement Certificate of Technology
3IT-WBDV	Computer Information Technology-Web Application Development A.A.S.
4IT-WBDV	Computer Information Technology-Web Application Development Certificate of Technology
6COSM-FAC	Cosmetology-Facial Occupational Certificate
3COSM-INST	Cosmetology Instructor A.A.S.
4COSM-INST	Cosmetology Instructor Certificate of Technology
6COSM-NAI	Cosmetology-Nail Technology Occupational Certificate
3COSM-OP	Cosmetology Operator A.A.S.
4COSM-OP	Cosmetology Operator Certificate of Technology
4COSM-OPHS	Cosmetology High School Operator Certificate of Technology
MCOSM-HWW	Cosmetology Hairweaving Marketable Skills Achievement Award
4CRIJ-CORE	Criminal Justice Certificate of Technology
4CRIJ-CORR	Criminal Justice-Corrections Certificate of Technology
4CRIJ-CSTS	Criminal Justice-Crime Scene Certificate of Technology
3CRIJ-LE	Criminal Justice Law Enforcement A.A.S.
4CRIJ-LE	Criminal Justice Law Enforcement Certificate of Technology
3CRIJ-SS	Criminal Justice Social Service A.A.S.
4CRIJ-SS	Criminal Justice Social Service Certificate of Technology
3CULA	Culinary Arts A.A.S.
4CULA	Culinary Arts Certificate of Technology
3CULA-C	Culinary Arts-Chef Training A.A.S.
4CULA-C	Culinary Arts-Chef Training Certificate of Technology
MCULA-P	Culinary Pastry/Garde Manager Marketable Skills Achievement Award

Technical Programs

Major Codes	Technical Programs
3CULA-PC	Culinary Arts-Pastry Chef A.A.S.
4CULA-PC	Culinary Arts-Pastry Chef Certificate of Technology
3CULA-RSTR	Culinary Arts-Restaurant Management A.A.S.
4CULA-RSTR	Culinary Arts-Restaurant Management Certificate of Technology
3MED-SONO	Diagnostic Medical Sonography A.A.S.
3DEMR	Diesel Technology A.A.S.
4DEMR	Diesel Technology Certificate of Technology
3DIET-FSVC	Dietetics-Food Service Management A.A.S.
4DIET-FSVC	Dietetics-Food Service Management Certificate of Technology
3ELEC	Electrical Technology A.A.S.
4ELEC-TEC	Electrical Technology Certificate of Technology
6ELEC-TEC	Electrical Technology Occupational Certificate
4ELEC-EMRG	Electronics-Emerging Electronics Technology Certificate of Technology
6ELCTRN-COMM	Electronic Comm Technology Occupational Certificate
6ELCTRN-MT	Electronics Maintenance Technology Occupational Certificate
3ELECTRON	Electronics Technology A.A.S.
4ELECTRON	Electronics Technology Certificate of Technology
3EMT	Emergency Medical Technology A.A.S.
4EMT	Emergency Medical Technology Certificate of Technology
6EMT	Emergency Medical Occupational Certificate
6EMT-B&I	Emergency Medical-Basic & Intermediate Occupational Certificate
3DFTG	Engineering Design Graphics A.A.S.
4DFTG	Engineering Design Graphics Certificate of Technology
6DFTG	Engineering Design Graphics-Foundation Occupational Certificate
3DFT-A	Engineering Design Graphics-Architectural/Civil Drafting A.A.S.
4DFT-A	Engineering Design Graphics-Architectural/Civil Drafting Certificate of Technology
3DFT-M	Engineering Design Graphics-Mechanical A.A.S.
4DFT-M	Engineering Design Graphics-Mechanical Certificate of Technology
3DFT-PI	Engineering Design Graphics-Petro/Industrial A.A.S.
4DFT-PI	Engineering Design Graphics-Petro/Industrial Certificate of Technology

Major Codes	Technical Programs
3DFT-TA	Engineering Design Graphics-Technology Animator A.A.S.
4DFT-TA	Engineering Design Graphics-Technology Animator Certificate of Technology
3EYE	Eye Care Technology A.A.S.
4EYE	Eye Care Technology Certificate of Technology
6EYE	Eye Care Technology Occupational Certificate
3FIRE-PROT	Fire Protection-Firefighting A.A.S.
4FIREFTG	Fire Protection Technology Certificate of Technology
3FIRE-PMD	Firefighter Paramedic A.A.S.
3HITT-CAN	Health Information Management-Cancer Data Management Specialty A.A.S.
4HITT-CAN	Health Information Management-Cancer Data Management Certificate of Technology
3HITT-INF	Health Information Management A.A.S.
4HITT-MDBC	Health Information Management-Medical Bill/Coding Certificate of Technology
4HITT-MDC	Health Information Management-Medical Coding Certificate of Technology
3INST	Instrumentation Technology A.A.S.
4INST	Instrumentation Technology Certificate of Technology
MINST	Instrumentation Analyzer Marketable Skills Achievement Award
3INT-DSGN	Interior Design A.A.S.
4INTD-DSGN	Interior Design Certificate of Technology
4INTD-PRO	Interior Design-Professional Certificate of Technology
3INTL-LOG	International Business & Logistics A.A.S.
4INTL-LOG	International Business & Logistics Certificate of Technology
6INTL-LOG	International Business & Logistics Occupational Certificate
3INTL-MAR	International Business & Logistics-Maritime A.A.S.
4INTL-MAR	International Business & Logistics-Maritime Certificate of Technology
6INTL-MAR	International Business & Logistics-Maritime Occupational Certificate
4LTRM-CARE	Long-Term Care Administrative Certificate of Technology
4MASG-THPY	Massage Therapy Certificate of Technology
4MED-ASST	Medical Assisting Certificate of Technology
6MED-CLA	Medical Lab Clinical Lab Assistant Occupational Certificate
6MRAD-MRI	Medical Imaging-Medical Resonance Occupational Certificate

Technical Programs

Major Codes	Technical Programs
6MRADCMPT	Medical Imaging-Tomography Occupational Certificate
3MED-LABT	Medical Lab Technology A.A.S.
3MED-RAD	Medical Radiography A.A.S.
3MH-PSYC	Mental Health Clinical and Counseling Psychology A.A.S.
4MH-SAC	Mental Health Substance Abuse Counseling Certificate of Technology
4MH-TECH	Mental Health Technician Certificate of Technology
6MGT-ECOM	Business Management Development - E-Commerce Management Occupational Certificate
3MUS-RCRD	Music Recording A.A.S.
4MUS-AUDI	Music-Techniques-Audio Engineering Certificate of Technology
4MUS-BRCST	Music-Audio Broadcast Certificate of Technology
6MUS-SOUND	Music-Sound Recording Occupational Certificate
4WLD-NDT	Non-Destructive Testing Certificate of Technology
3NUR-LMOB	Nursing LVN-RN Mobility A.A.S.
3NUR-LTRN	Nursing LVN-RN Transition A.A.S.
3NURS	Nursing RN A.A.S.
4NUR-LVN	Licensed Vocational Nurse Certificate of Technology
3NUR-PMOB	Nursing-Paramedic-RN Mobility A.A.S.
3NUR-PTRN	Nursing-Paramedic-RN Transition A.A.S.
3OCC-HLTH	Occupational Health & Safety A.A.S.
4OCC-HLTH	Occupational Health & Safety Certificate of Technology

Major Codes	Technical Programs
3PARA-LGL	Para-Legal A.A.S.
4PHAR	Pharmacy Technician Certificate of Technology
3PH-THRPY	Physical Therapy Assistant A.A.S.
3PROT	Process Technology A.A.S.
4PROT	Process Technology Certificate of Technology
3PROT-CHM	Process Technology-Chemical Lab Technology A.A.S.
3REAL	Real Estate A.A.S.
4REAL	Real Estate Certificate of Technology
6REAL	Real Estate Occupational Certificate
3RESP	Respiratory Care A.A.S.
3SURT	Surgical Technology A.A.S.
4SURT	Surgical Technology Certificate of Technology
3VCOM	Visual Communication A.A.S.
4VCOM	Visual Communication Certificate of Technology
4VCDM	Visual Communication-Digital M/C Animation Certificate of Technology
3WLD-NDT	Welding Non-Destructive Testing A.A.S.
3WLD	Welding Technology A.A.S.
4WLD-C	Welding-Combination Welder Certificate of Technology
4WLD-GAS	Welding-Gas Shielded Arc Certificate of Technology
6WLD-STI	Welding-Stick Pipe Occupational Certificate
6WLD-STR	Welding-Structural Welder Occupational Certificate
6WLD-QAT	Wldg-NDT QA Technology Occupational Certificate

Associate of Applied Science Degrees

All associate of applied science (A.A.S.) degrees have these requirements in common:

- A minimum of 15 semester credit hours of general education courses. Courses that satisfy this requirement are listed in the Transfer Core Curriculum, unless otherwise indicated.
- Basic skills in the use of computers.

Other requirements for the A.A.S. degree are dependent upon the particular technical program. The technical courses included in this degree are not designed to be transferable to senior institutions; however, some colleges may accept certain courses in transfer. Students should consult a College counselor or the chair of the department offering the program for information regarding possible transfer of technical courses.

The curricula for the associate of applied science degree programs are included in this section of the Catalog, listed alphabetically by major. For additional requirements for these degrees, students should refer to the section titled “Awarding of Degrees and Certificates.”

Technical Certificates

The College offers technical certificates as evidence that students have completed a certain set of technical courses designed to develop one or more skills related to a particular career field. Students may receive a certificate of technology, an occupational certificate, and/or a certificate of specialization.

For general requirements for each of these certificates, students should refer to the section titled “Awarding of Degrees and Certificates.” For specific course requirements for these certificates, students should refer to the particular technical program listed alphabetically by major in this section of the Catalog.

For additional information concerning technical certificates, students should consult a College counselor or speak with the department chair offering the certificate program.

Technical Programs

Accounting

Accounting (3ACNT)

Associate of Applied Science Degree

All Campuses

The Accounting Associate of Applied Science is an accelerated two-year accounting program for people preparing for immediate careers in accounting. Students pursuing a bachelor’s degree in accounting should refer to the information about the associate of arts degree in the Transfer Programs section and see a counselor prior to registration.

First Term	Credit
ACCT 2301—Accounting Principles I	3
ACNT 1331—Federal Income Tax: Individual	3
BUSI 1301—Introduction to Business	3
BCIS 1305—Business Computer Applications	3
BUSI 2301—Business Law I	3
	15
Second Term	Credit
ACCT 2302—Accounting Principles II	3
ACNT 1329—Payroll and Business Tax Accounting	3
ACNT 1311—Introduction to Computerized Acct	3
BMGT 1341—Business Ethics	3
BUSG 2309—Small Business Management	3
SPCH 1315—Public Speaking or SPCH 1321—Business and Professional Speech	3
	18
Third Term	Credit
ACNT 2303—Intermediate Accounting I	3
ACNT 2309—Cost Accounting	3
BUSI 2304—Business Communications	3
ENGL 1301—Composition I	3
Economics or Psychology or Sociology	3
PHED Activity	1
	16
Fourth Term	Credit
ACNT 2366—Practicum- Accounting	3
ACNT 2304—Intermediate Accounting II	3
ENGL 2311—Technical Report Writing or ENGL 1302—English Composition II	3
Math 1333—Contemporary Mathematics or MATH 1314—College Algebra	3
PHED Activity	1
*Humanities or Fine Arts	3
	16
Associate of Applied Science Degree Total	65

Capstone Experience: ACNT 2366

* Courses that satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.Accounting (4ACNT)

Technical Programs

Accounting (4ACNT)

Certificate of Technology

All Campuses

The Accounting Certificate of Technology is designed to prepare students for early entry into an accounting career. At least one half of the credit hours must be earned at San Jacinto College.

These courses are required for the certificate of technology and also qualify as the first two terms of the Associate of Applied Science in Accounting.

First Term	Credit
ACCT 2301—Accounting Principles I	3
ACNT 1331—Federal Income Tax: Individual	3
BUSI 1301—Introduction to Business	3
BCIS 1305—Business Computer Applications	3
BUSI 2301—Business Law I	3
	15
Second Term	Credit
ACCT 2302—Accounting Principles II	3
ACNT 2303—Intermediate Accounting I	3
ACNT 1329—Payroll and Business Tax Accounting	3
ACNT 1311—Introduction to Computerized Accounting	3
BGMT 1341—Business Ethics	3
SPCH 1315—Public Speaking or SPCH 1321—Business and Professional Speech	3
	18
Certificate of Technology Total	33

Capstone Experience: ACNT 1311

Accounting (6ACNT)

Occupational Certificate

All Campuses

The purpose of this certificate is to provide short-term, intensive training in accounting theory and procedures, and in the use of business machines and accounting software.

All of the courses required for this certificate also apply toward the Certificate of Technology and the Associate of Applied Science in Accounting.

First Term	Credit
ACCT 2301—Accounting Principles I	3
ACCT 2302—Accounting Principles II	3
ACNT 1329—Payroll and Business Tax Accounting	3
ACNT 1331—Federal Income Tax: Individual	3
ACNT 1311—Introduction to Computerized Accounting	3
BUSI 1301—Introduction to Business	3
BCIS 1305—Business Computer Applications	3
Occupational Certificate Total	21

Capstone Experience: ACNT 1311

Aeronautical Technology

Central Campus

All students must have the approval of the aeronautical department chair before enrolling in flight courses. Fees for flight courses will be in addition to normal college tuition and fees and are subject to contractual and federal aviation regulation changes.

- To be eligible for the A.A.S. degree, students will complete their flight courses through the College-approved flight contractor for College credit. However, the following exceptions apply:

- Students who have obtained a private, commercial, instrument and/or multi-engine rating prior to their first admission to the San Jacinto College pilot program may apply for advanced placement testing and/or course substitution according to the following guidelines:

- Up to 16 semester hours of credit may be awarded by advanced placement testing for the following courses: AIRP 1215, 1255, 1301, 1311, 1451, 2239, 2250, 2251, and 2337. Students must apply for and complete an advanced placement test before completion of the first term of enrollment in aviation courses.

- In addition to receiving authorization for a maximum of 16 semester hours of advanced placement credit, students may petition the department chair for approval to take substitute courses for required courses in the curriculum for which they have earned certain certifications and/or ratings prior to entering San Jacinto College. Substitute courses are listed below and are acceptable, with department chair approval, in specific options in which the course is not included as a requirement.

- The following courses are acceptable in specific options in which the course is not included as a requirement:

ACCT 2301	ACCT 2302	AIRP 1341	AIRP 1345
AIRP 2242	AIRP 2243	AIRP 2251	AIRP 2331
AIRP 2333	AIRP 2336	AIRP 2352	AIRP 2353
AIRP 2357	AVIM 2335	AVIM 2337	AVIM 2339
BGMT 1301	BGMT 1303	BGMT 1313	CHEM 1411
CHEM 1412	DFTG 1405	DFTG 2417	ECON 2301
ECON 2302	ELPT 1311	ENGL 1302	HRPO 1311
HRPO 2301	ITSC 1301	ITSC 1305	ITSC 1309
ITSC 1310	ITSC 1318	ITSC 1329	ITSC 1331

Technical Programs

MATH 1314	MATH 1316	MATH 1324	MATH 1325
MATH 2312	MATH 2318	MATH 2320	MATH 2413
MATH 2414	MATH 2415	MRKG 1311	PHYS 1401
SPAN 1411	SPAN 1412	SPAN 2311	SPAN 2312
MATH 1333			

- Aviation students must maintain a grade point average of at least 2.0 in all aviation courses. Students enrolled in flight courses must earn a grade of C or above in order to progress to the next flight course.

Hazlewood Tuition Exemption (Section 54.203, Education Code)

The following conditions apply to students seeking exemption from payment of flight fees under the provisions of Section 54.203, Education Code.

- d. All flight course requirements must be verified by an aeronautical department examination of the student's logbook.
2. Students who provide documentation of total flight hours accumulated prior to their admission to San Jacinto College pilot program, and who obtained this training at an FAR Part 141 certified school, may apply to transfer up to one-half of those hours into the San Jacinto College pilot program and apply those hours toward flight course requirements.
 3. Students who provide documentation of total flight hours accumulated prior to their first admission to the San Jacinto College pilot program, and who have obtained this training under an FAR Part 61, may apply to transfer up to one-fourth of those hours into the San Jacinto College pilot program and apply those hours toward flight course requirements.
- Students may elect to contract directly with the College-approved flight contractor for flight instruction and pay the cost of that instruction to the contractor. Such students would petition the aeronautical department chair for approval to take other credit courses which would substitute for the required flight courses in the degree program. Students who choose this arrangement may not be eligible for college financial assistance.
 - The College may withdraw any student from a flight course for the following reasons:
 1. Student's failure to conform to published FAA regulations
 2. Student's failure to conform to the flight contractor's College-approved course syllabus and College-approved safety rules and regulations as published in the Flight Student Handbook
 3. Student's involvement in one or more FAA reportable accidents or incidents
 - The College may, upon the flight contractor's recommendation, refuse to enroll a student in a subsequent flight course.
 - A student who is denied enrollment in or is withdrawn from a flight course may appeal this decision by following the sequence specified for grade appeal in the SJC Student Handbook.
 - Students may enroll in a maximum of two flight courses per registration period.

- Students eligible under the Hazlewood Act may be eligible for a partial Hazlewood exemption if the cost of registration exceeds the amount of V.A. Education Benefits received. (See V.A. Counselor in the Financial Aid Office for details.)
- All flight courses are eligible for the Hazlewood exemption; however, a student may enroll in each flight course only one time under this exemption. Also, a student is limited to two flight courses per term.

Aircraft Dispatcher (4AERO-DSP)

Certificate of Technology

Central Campus

Students must be at least 22 1/2 years old to enroll in AIRP 2353

First Term	Credit
AIRP 1301—Air Navigation	3
AIRP 1307—Aviation Meteorology	3
AIRP 1311—Flight Theory	3
AIRP 1341—Advanced Air Navigation	3
AIRP 1451—Instrument Ground School	4
	16

Second Term	Credit
AIRP 2331—Advanced Meteorology	3
AIRP 2333—Aircraft Systems	3
AIRP 2355—Propulsion Systems	3
AIRP 2352—Practical Dispatching I	3
AIRP 2353—Practical Dispatching II	3
	15

Certificate of Technology Total **31**

Capstone Experience: Federal Aviation Administration Airline Dispatcher written and practical examinations.

Technical Programs

Career Pilot (4AERO-PLT)

Certificate of Technology

Central Campus

First Term	Credit
AIRP 1301–Air Navigation	3
AIRP 1307–Aviation Meteorology	3
AIRP 1311–Flight Theory	3
AIRP 1215–Private Flight	2
	11

Second Term	Credit
AIRP 1341–Advanced Air Navigation	3
AIRP 1451–Instrument Ground School	4
AIRP 2331–Advanced Meteorology	3
AIRP 2250–Instrument Flight	2
AIRP 1255–Intermediate Flight	2
	14

Third Term	Credit
AIRP 2337–Commercial Ground School	3
AIRP 2239–Commercial Flight	2
AIRP 2251–Multi-Engine Flight	2
AIRP 2336–Certified Flight Instructor-Airplane or AIRP 2242–Flight Instructor-Instrument Airplane or AIRP 2243–Flight Instructor-Multi-Engine Airplane.....	2-3
	10-11

Certificate of Technology Total **35-36**

Capstone Experience: Federal Aviation Administration, Private, Commercial, Instrument and Flight Instructor or Multi-Engine or Instrument Flight Instructor or Multi-Engine Flight Instructor written and practical examinations.

Note: Optional courses which may be taken for the certificate of technology in lieu of AIRP 1215 and 1255: AIRP 2242, 2251, or 2243.

Aviation Management (3AERO-MGT)

Associate of Applied Science Degree

Central Campus

Aviation management is a two-year program leading to an associate of applied science degree. The curriculum includes basic management and business courses, plus advanced courses directed toward the application of principles of management and marketing to aviation industry problems.

Graduates of this program may consider employment in airport and airline management, general aviation sales and services, or in a government agency serving aviation.

First Term	Credit
AIRP 1311–Flight Theory	3
AVIM 1301–Introduction to Aviation Management	3
ENGL 1301–Composition I	3
HRPO 1311–Human Relations.....	3
**MATH 1333 Contemporary Mathematics or MATH 1314 College Algebra	3
PHED Activity	1
	16

Second Term	Credit
AIRP 1307–Aviation Meteorology	3
**Humanities or Fine Arts.....	3
ECON 2302–Principles of Microeconomics.....	3
ENGL 2311–Technical Report Writing.....	3
BMGT 1303–Principles of Management.....	3
PHED Activity	1
	16

Third Term	Credit
ACCT 2301–Accounting Principles I	3
BUSI 2301–Business Law I.....	3
HRPO 2301–Human Resource Management	3
Speech	3
PSYC 2301–General Psychology	3
Computer Science or Computer Information Systems.....	3
	18

Fourth Term	Credit
Approved Aviation Electives	12
BUSG 2309–Small Business Management	3
	15
Associate of Applied Science Degree Total	65

Capstone Experience: Aviation Business Plan

* College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives		
AIRP 1345	AVIM 2335	AVIM 2337
AVIM 2339	AVIM 2331	AVIM 1301

Technical Programs

Aircraft Maintenance Management Specialty (3AERO-MNT)

Associate of Applied Science Degree

Central Campus

San Jacinto College recognizes the Federal Aviation Administration (FAA) Certification for Airframe and Powerplant Technician as the equivalent of 36 semester hours of college course work. In addition to this FAA certification, 35 semester credit hours (as specified in the Aircraft Maintenance Management option curriculum) are required for the degree. Students who expect to receive VA educational benefits must have their FAA certification in Airframe and Powerplant prior to enrolling in the program. Pre-requisite is FAA Certification.

First Term	Credit
BMGT 1301—Supervision	3
ENGL 1301—Composition I	3
BMGT 1313—Principles of Purchasing	3
Speech	3
**Behavioral or Social Science	3
	15

Second Term	Credit
Approved Aviation Electives	9
*MATH 1333 Contemporary Mathematics or MATH 1314 College Algebra	3
BMGT 1303—Principles of Management	3
PHED Activity	1
	16

Third Term	Credit
**Humanities or Fine Arts	3
PHED Activity	1
	4

Associate of Applied Science Degree Total **35**

Capstone Experience: Aviation Business Plan

* College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

AIRP 1307	AIRP 1345	AVIM 1301	AVIM 2331
AVIM 2335	AVIM 2337	AVIM 2339	

Pilot Development Program (PDP) (3AERO-PDP)

Associate of Applied Science Degree

Central Campus

The PDP is an ongoing effort of the College and the Delta Connection Academy to address the need for quality-trained airline pilots.

The objective of this program is to prepare a student with no prior flight experience for an entry-level position as first officer with a regional airline. Each student is carefully tracked and evaluated in the areas of knowledge, attitude, aptitude, and flying skills. Graduates will be given an opportunity to teach for the Delta Connection Academy. Successful students may be given interviews for a first officer position with one of the Delta Connection Academy approved FAA Part 121 air carriers, including Continental Express.

After graduates receive a hiring offer, they will receive additional flight training to further prepare them for a successful career as an airline pilot.

For additional information contact the aeronautical department chair.

First Term	Credit
AIRP 1301—Air Navigation	3
AIRP 1307—Aviation Meteorology	3
AIRP 1311—Flight Theory	3
AIRP 1215—Private Flight	2
*MATH 1333 Contemporary Mathematics or MATH 1314 College Algebra	3
AIRP 1347—Human Factors in Aviation	3
	17

Second Term	Credit
AIRP 1341—Advanced Air Navigation	3
AIRP 1451—Instrument Ground School	4
AIRP 2331—Advanced Meteorology	3
AIRP 2250—Instrument Flight	2
AIRP 1255—Intermediate Flight	2
ENGL 1301—Composition I	3
	17

Third Term	Credit
AIRP 2337—Commercial Ground School	3
AIRP 1343—Aerodynamics	3
AIRP 2355—Propulsion Systems	3
AIRP 2239—Commercial Flight	2
ENGL 2311—Technical Report Writing	3
*Behavioral or Social Science	3
PHED Activity	1
	18

Technical Programs

Technical Programs

Fourth Term	Credit
AIRP 2333—Aircraft Systems	3
AVIM 2331—Airline Management.....	3
AIRP 2251—Multi-Engine Flight	2
*Humanities or Fine Arts	3
PHED Activity	1
Speech	3
AIRP 2357—Turbine Aircraft Systems Ground School	3

18

Associate of Applied Science Degree Total **70**

Capstone Experience: Federal Aviation Administration, Private, Commercial and Instrument written and practical examinations.

* College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

- AIRP 1215—requires 19 hours of Flight Trainer laboratory
- AIRP 1255—requires 7 hours of Flight Trainer laboratory
- AIRP 2239—requires 16 hours of Flight Trainer laboratory
- AIRP 2250—requires 24 hours of Flight Trainer laboratory
- AIRP 2251—requires 8 hours of Flight Trainer laboratory

Notes:

1. Hours indicated for flight courses are flying hours and do not reflect the hours of oral instruction.
2. A combination of AIRP 1301, 1307, and 1311 prepares students to take the FAA Private Pilot written examination.
3. The completion of AIRP 2337 prepares students to take the FAA Commercial Pilot written examination.
4. The completion of AIRP 1451 prepares the student to take the FAA Instrument Pilot written examination.

Pilot Development Program (4AERO-PDP)

Certificate of Technology

Central Campus

First Term	Credit
AIRP 1307—Aviation Meteorology	3
AIRP 1347—Human Factors in Aviation	3
AIRP 1343—Aerodynamics.....	3
AIRP 2331—Advanced Meteorology	3
AVIM 2331—Airline Management.....	3
AIRP 2355—Propulsions Systems	3
AVIM 1301—Introduction to Aviation Management or AVIM 2339—Aviation Marketing.....	3
AIRP 2333—Aircraft Systems	3
AIRP 2357—Turbine Aircraft Systems Ground School	3

Certificate of Technology Total **27**

Capstone Experience: Comprehensive Department Examination

Air Conditioning Technology

Air Conditioning Technology (3AIRC)

Associate of Applied Science Degree

North and South Campuses

The air conditioning technology program is designed to provide students with the entry-level skills required for employment as technicians in residential and light commercial air conditioning, refrigeration, and heating.

A graduate of this program will have a good foundation in the principles of air conditioning, refrigeration, and heating, with main emphasis on troubleshooting and service. Related topics of energy conservation, air systems analysis, and air conditioning codes are also thoroughly covered.

First Term	Credit
HART 1401—Basic Electricity for HVAC	4
HART 1407—Refrigeration Principles	4
HART 1441—Residential Air Conditioning	4
HART 1445—Gas and Electric Heating.....	4
PHED Activity	1

17

Second Term	Credit
HART 2442—Commercial Refrigeration.....	4
HART 2431—Advanced Electricity	4
HART 2441—Commercial Air Conditioning.....	4
ENGL 1301—Composition I	3
PHED Activity	1

16

Third Term	Credit
Air Conditioning Approved Elective.....	3
MATH 1333 Contemporary Mathematics or MATH 1314 College Algebra or higher.....	3
ENGL 2311—Technical Report Writing.....	3
BUSG 2309—Small Business Management	3
Air Conditioning Approved Elective.....	3

15

Technical Programs

Fourth Term	Credit
HART 2345–Residential Air Conditioning Systems Design	3
HART 2302–Commercial Air Conditioning System Design.....	3
HART 2301–A/C and Refrigeration Codes or HART 2368–Practicum–Heating, A/C and Refrigeration Technician.	3
Speech	3
*Behavioral or Social Science	3
*Humanities or Fine Arts	3
	18

Associate of Applied Science Degree Total **66**

Capstone Experience: HART 2301 or HART 2368

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.*

Approved Electives		
HART 2301	HART 2368	HART 2334
HART 2436	HART 2343	HART 2449

Commercial and Industrial Air Conditioning (4AIRC-COMM)

Certificate of Technology

North and South Campuses

The commercial and industrial air conditioning certificate of technology program is designed to provide students with both general knowledge of air conditioning and also advanced knowledge of commercial and industrial air conditioning applications.

First Term	Credit
HART 1401–Basic Electricity for HVAC	4
HART 1407–Refrigeration Principles	4
HART 1441–Residential Air Conditioning	4
HART 1445–Gas and Electric Heating.....	4
	16

Second Term	Credit
HART 2431–Advanced Electricity	4
HART 2441–Commercial Air Conditioning.....	4
HART 2301 – A/C and Refrigeration Codes or HART 2368 – Practicum - Heating, A/C and Refrigeration Technician	3
	11

Third Term	Credit
HART 2302–Commercial Air Conditioning Systems Design.....	3
HART 2343–Industrial Air Conditioning.....	3
HART 2334–Advanced A/C Controls	3
Air Conditioning Approved Electives	9
	18

Certificate of Technology Total **45**

Capstone Experience: HART 2343

Approved Electives		
HART 2301	HART 2368	HART 2345
HART 2436	HART 2442	HART 2449

Air Conditioning Technology (4AIRC)

Certificate of Technology

North and South Campuses

The air conditioning certificate of technology program is designed to provide students with general knowledge required of air conditioning service technicians and/or air conditioning contractors.

First Term	Credit
HART 1401–Basic Electricity for HVAC	4
HART 1407–Refrigeration Principles	4
HART 1441–Residential Air Conditioning	4
HART 1445–Gas Electrical Heating.....	4
	16

Second Term	Credit
HART 2431–Advanced Electricity	4
HART 2441–Commercial Air Conditioning.....	4
HART 2301 – A/C and Refrigeration Codes or HART 2368 – Practicum - Heating, A/C and Refrigeration Technician	3
Air Conditioning Approved Elective.....	3
	14

Certificate of Technology Total **30**

Capstone Experience: HART 2301 or HART 2368

Approved Electives		
HART 1356	HART 2301	HART 2302
HART 2334	HART 2343	HART 2345
HART 2368	HART 2442	HART 2449

Technical Programs

Air Conditioning Technology (6AIRC)

Occupational Certificate

The air conditioning occupational certificate program is designed to provide students with entry-level skills in the field of residential air conditioning and heating. The purpose of this certificate is to provide short-term training in air conditioning.

Students are eligible for the certificate indicated upon completion of the designated courses. All the courses in this certificate also apply toward the certificate of technology and the associate of applied science degree.

First Term	Credit
HART 1401–Basic Electricity for HVAC	4
HART 1407–Refrigeration Principles	4
HART 1441–Residential Air Conditioning	4
HART 1445–Gas and Electric Heating.....	4
Occupational Certificate Total	16
Capstone Experience: HART 1441	

Applied Computer Electronics Technology

See *Electronics Technology*

Automotive Collision Repair Technology

Automotive Collision Repair Technology (3ABDR-CR)

Associate of Applied Science Degree

North and South Campuses

Collision repair is a skilled craft which involves repairing collision-damaged motor vehicles through straightening frames, removing dents, welding torn metal, replacing damaged parts, spot repairing, and overall refinishing. Emphasis is placed on repairing late model vehicles.

First Term	Credit
ABDR 1307–Auto Body Welding	3
ABDR 1519–Basic Metal Repair	5
ABDR 1431–Basic Refinishing	4
ABDR 1303–Vehicle Design and Structural Analysis	3
PHED Activity	1
	16

Second Term

ABDR 2541–Major Collision Repair and Panel Replacement.....	5
ABDR 2353–Color Analysis and Paint Matching.....	3
ABDR 1315–Vehicle Interior Trim and Hardware.....	3
PHED Activity	1
ABDR 1441–Structural Analysis and Damage Repair I.....	4

16

Third Term

ENGL 1301–Composition I	3
ABDR 1449–Automotive Plastic and Sheet Molded Compound Repair.....	4
SPCH 1321–Business and Professional Speech	3
*Behavioral or Social Science	3
MATH 1333–Contemporary Mathematics or	
MATH 1314–College Algebra	3

16

Fourth Term

ABDR 2380–Cooperative Education–Autobody/Collision and Repair Technology/Technician	3
ABDR 2502–Auto Body Mechanical and Electrical Service.....	5
ENGL 2311–Technical Report Writing.....	3
*Humanities or Fine Arts	3

14

Associate of Applied Science Degree Total

62

Capstone Experience: ABDR 2380

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Automotive Collision Repair (4ABCR-CR)

Certificate of Technology

North and South Campuses

First Term

ABDR 1307–Auto Body Welding	3
ABDR 1519–Basic Metal Repair	5
ABDR 1431–Basic Refinishing	4
ABDR 1303–Vehicle Design and Structural Analysis.....	3

15

Second Term

ABDR 2541–Major Collision Repair and Panel Replacement.....	5
ABDR 1441–Structural Analysis and Damage Repair I.....	4
ABDR 2353–Color Analysis and Paint Matching.....	3
ABDR 1315–Vehicle Interior Trim and Hardware.....	3

15

Third Term	Credit
ABDR 1449–Automotive Plastic Repair	4
ABDR 2380–Cooperative Education–Autobody Collision and Repair Technology/Technician	3
ABDR 2502–Auto Body Mechanical and Electrical Service	5
	12
Certificate of Technology Degree Total	42
Capstone Experience: ABDR 2380	

Automotive Non-Collision Repair (4ABCR-NC)

Certificate of Technology

North and South Campuses

First Term	Credit
ABDR 1519–Basic Metal Repair	5
ABDR 1558–Intermediate Refinishing	5
ABDR 1431–Basic Refinishing	4
	14
Second Term	Credit
ABDR 1555–Minor Metal Repair	5
ABDR 1303–Vehicle Design and Structural Analysis	3
ABDR 2549–Advanced Refinishing	5
	13
Certificate of Technology Total	27
Capstone Experience: ABDR 2549	

Automotive Collision Repair Technology

Automotive Painting Specialty (6ACRT-PNT)

Occupational Certificate

North and South Campuses

First Term	Credit
ABDR 1431–Basic Refinishing	4
ABDR 1558–Intermediate Refinishing	5
ABDR 2551–Specialized Refinishing Techniques	5
ABDR 2549–Advanced Refinishing	5
	19
Occupational Certificate Total:	19
Capstone Experience: ABDR 2551	

Technical Programs

Automotive Collision Repair Technology – Repair Assistant Specialty (6ACRT-AST)

Occupational Certificate

North and South Campuses

First Term	Credit
ABDR 1303–Vehicle Design and Structural Analysis	3
ABDR 1519–Basic Metal Repair	5
ABDR 1307–Auto Body Welding	3
ABDR 2541–Major Collision Repair and Panel Replacement	5
ABDR 1315–Vehicle Interior Trim and Hardware	3
	19
Occupational Certificate Total:	19
Capstone Experience: ABDR 2541	

Automotive Collision Repair Technology

Management Specialty (3ABCR-MGT)

Associate of Applied Science Degree

North and South Campuses

First Term	Credit
ABDR 1307–Auto Body Welding	3
ABDR 1519–Basic Metal Repair	5
ABDR 1431–Basic Refinishing	4
ABDR 1303–Vehicle Design and Structural Analysis	3
PHED Activity	1
	16

Second Term	Credit
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ABDR 2541–Major Collision Repair and Panel Replacement	5
ABDR 1441–Structural Analysis and Damage Repair I	4
ABDR 1315–Vehicle Interior Trim and Hardware	3
ABDR 2353–Color Analysis and Paint Matching	3
PHED Activity	1
	16

Third Term	Credit
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ENGL 1301–Composition I	3
ABDR 1323–Front and Rear Wheel Alignment	3
ABDR 2255–Collision Repair Estimating	2
MATH 1333–Contemporary Mathematics for Technical Programs or MATH 1314–College Algebra	3
*Behavioral or Social Science	3
	14

Technical Programs

Fourth Term

ENGL 2311–Technical Report Writing.....	3
ABDR 2502–Auto Body Mechanical and Electrical Service	5
ABDR 2257–Collision Repair Shop Management.....	2
SPCH 1321–Business and Professional Speech	3
*Humanities or Fine Arts	3

Credit

Associate of Applied Science Degree Total 16

Capstone Experience: ABDR 2257 62

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Automotive Collision Repair Technology Management Specialty (4ABCR-MGT)

Certificate of Technology

North and South Campuses

First Term

ABDR 1307–Auto Body Welding.....	3
ABDR 1519–Basic Metal Repair	5
ABDR 1431–Basic Refinishing	4
ABDR 1303–Vehicle Design and Structural Analysis.....	3

Credit

15

Second Term

ABDR 2541–Major Collision Repair and Panel Replacement.....	5
ABDR 1441–Structural Analysis and Damage Repair I.....	4
ABDR 2353–Color Analysis and Paint Matching.....	3
ABDR 1315–Vehicle Interior Trim and Hardware.....	3

Credit

15

Third Term

ABDR 1323–Front and Rear Wheel Alignment	3
ABDR 2502–Auto Body Mechanical and Electrical Service	5
ABDR 2255–Collision Repair Estimating.....	2
ABDR 2257–Collision Repair Shop Management.....	2

Credit

12

Certificate of Technology Total 42

Capstone Experience: ABDR 2257

Automotive Technology

Automotive Technology (3AUTO)

Associate of Applied Science Degree

Central Campus

The automotive technology program is designed to prepare graduates to enter the rapidly changing automotive repair industry. Students will study each automobile system, where they will learn the theory of operation, along with the proper diagnostic procedure to repair a system problem. Each course will have a laboratory session where each student will have an opportunity to practice the concepts and procedures studied in the classroom.

Students are required to furnish a prescribed hand-tool set and be prepared to upgrade the required tools as the program progresses. All tuition, fees, and textbook costs are the responsibility of the student.

First Term

AUMT 1305–Introduction to Automotive Technology.....	3
AUMT 1407–Automotive Electrical Systems.....	4
AUMT 1316–Automotive Suspension and Steering Systems.....	3
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity.....	1

Credit

14

Second Term

AUMT 1419–Automotive Engine Repair.....	4
AUMT 2311–Automotive Electronic Controls	3
AUMT 1310–Automotive Brake Systems	3
ENGL 1301–Composition I	3
Speech.....	3

Credit

16

PostY1Summer

AUMT 1345–Auto Heating and Air Conditioning.....	3
Approved Elective	3

Credit

6

Third Term

AUMT 2313–Manual Drive Train and Axles	3
ENGL 2311–Technical Report Writing.....	3
**Behavioral or Social Science	3
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
AUMT 2417–Auto Engine Perform Analysis I	4

Credit

16

Technical Programs

Fourth Term	Credit
Approved Elective	3
AUMT 2425–Auto Transmissions and Transaxle.....	4
**Humanities or Fine Arts.....	3
PHED Activity	1

11

Associate of Applied Science Degree Total **63**

Approved Electives		
AUMT 2455	AUMT 2349	AUMT 2357
AUMT 2371	AUMT 2388	

Capstone Experience: AUMT 2388 or National A.S.E.

Certification Exams

* College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Automotive Technology (4AUTO)

Certificate of Technology

Central Campus

The Automotive Technology Certificate of Technology is a one-year certificate program designed for students who would like to pursue a job as an automotive diagnostic technician in a short period of time. Students working toward this certificate are restricted to taking only the automotive courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. If students decide to continue their education afterward, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology.....	3
AUMT 1407–Automotive Electrical Systems.....	4
AUMT 1316–Automotive Suspension and Steering Systems.....	3
AUMT 2311–Automotive Electronic Controls	3
AUMT 1310–Automotive Brake Systems	3
AUMT 1419–Automotive Engine Repair.....	4

20

Second Term	Credit
AUMT 1345–Automotive Heating and Air Conditioning	3
AUMT 2313–Automotive Drive Train and Axles	3
Approved Elective	3
AUMT 2425–Automotive Automatic Transmission and Transaxle	4
AUMT 2417–Engine Performance Analysis.....	4

Certificate of Technology Total **17**

Approved Electives		
AUMT 2455	AUMT 2349	AUMT 2357
AUMT 2371	AUMT 2388	

Capstone Experience: AUMT 2388 or National A.S.E.

Certification Exams

Automotive Technology – Maintenance and Light Repair* (4AUTO-MLR)

Certificate of Technology

Central Campus

The Maintenance and Light Repair Certificate of Technology is a one-year certificate program designed for students who prefer jobs in the express lube service field working for a major automotive manufacturer such as Ford, GM, Toyota, Honda, or specialty shops such as Jiffy Lube. Students working toward this certificate are restricted to taking only the courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. If students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology.....	3
AUMT 1407–Automotive Electrical Systems.....	4
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology Technician	3
AUMT 1316–Automotive Suspension and Steering Systems.....	3

13

Second Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 1345–Automotive Heating and Air Conditioning	3
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician.....	3

9

Maintenance and Light Repair Certificate Total **22**

Capstone Experience: AUMT 2388 or National A.S.E.

Certification Exams

* Students enrolling in the Maintenance and Light Repair Certificate of Technology program must be sponsored by an approved automotive dealer or fleet repair facility and maintain all employment requirements. Students completing all approved courses with a Honda emphasis will receive a certificate of technology.

Technical Programs

Automotive Technician Trainee – Under Car* (4AUTO-UC)

Certificate of Technology

Central Campus

The Automotive Technician Trainee-Under Car Certificate of Technology is a one-year certificate program designed for students who would like to pursue jobs diagnosing and repairing transmissions, drive lines, suspension and steering, and brake systems. Students working toward this certificate are restricted to taking only the automotive courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. If students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
AUMT 1316–Automotive Suspension and Steering Systems.....	3
AUMT 1310–Automotive Brake Systems	3
	13
Second Term	Credit
AUMT 2313–Automotive Manual Drive Train and Axles.....	3
AUMT 2417–Automotive Engine Performance Analysis I.....	4
AUMT 2425–Automotive Automatics Transmission and Transaxle...	4
	11
Under Car Certificate of Technology Total	24

Capstone Experience: National A.S.E. Certification Exams

* Students enrolling in the Automotive Technician Trainee–Under Car Certificate of Technology program may choose to specialize with a Honda emphasis in approved courses (AUMT 1407, AUMT 2425, AUMT 2413, AUMT 1416, AUMT 1410 and AUMT 2417). Students completing all approved courses with a Honda emphasis will receive a certificate of technology.

Automotive Technician Trainee – Under Hood* (4AUTO-UH)

Certificate of Technology

Central Campus

The Automotive Technician Trainee–Under Hood Certificate of Technology is a one-year certificate designed for students who would like to pursue jobs diagnosing and repairing automotive electrical and electronic control systems, and heating and air conditioning systems. Students will also learn how to use basic engine performance diagnostic equipment and machines used in precision engine rebuilding, cylinder reconditioning, and crack repair. Students working toward this

certificate are restricted to taking only the automotive courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. If students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
AUMT 1419–Automotive Engine Repair	4
AUMT 2311–Automotive Electronic Controls	3
	14
Second Term	Credit
AUMT 1345–Automotive Heating and Air Conditioning	3
AUMT 2417–Automotive Engine Performance Analysis I.....	4
AUMT 2455–Automotive Engine Machining.....	4
	11
Under Hood Certificate of Technology Total	25

Capstone Experience: National A.S.E. Certification Exams

* Students enrolling in the Automotive Technician Trainee–Under Hood Certificate of Technology program may choose to specialize with a Honda emphasis in approved courses (AUMT 1405, AUMT 1407, AUMT 1419, AUMT 2417, AUMT 2455, and AUMT 1445). Students completing all approved courses with a Honda emphasis will receive a certificate of technology.

Automotive Machinist (4AUTO-MCN)

Certificate of Technology

Central Campus

Students enrolled in the automotive machinist certificate of technology program receive training that prepares them for employment in area machine shops. Students study the skills necessary to perform machining and repair operations to small and large internal combustion power plants, including gasoline and diesel applications. Students working toward this certificate are restricted to taking only the courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. If students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1419–Automotive Engine Repair	4
WLDG 1534–Introduction to Gas Tungsten Arc Welding (GTAW)	5
AUMT 2455–Automotive Engine Machining.....	4
AUMT 2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
	19

Technical Programs

Second Term	Credit
WLDG 2551–Advanced Gas Tungsten Arc Welding (GTAW)	5
	5
Machinist Certificate of Technology Total	24
Capstone Experience: National A.S.E. Certification Exams	

College Automotive Program (CAP) Chrysler (3AUTO-C)

Associate of Applied Science

Central Campus

The Chrysler College Automotive Program (CAP) is a two-year automotive program designed to update the technical and professional level of the incoming dealership technician. The curriculum has been co-designed by Chrysler and San Jacinto College to lead to an Associate of Applied Science in Automotive Technology. The program requires students to work at a Chrysler dealership (Chrysler, Dodge, Jeep) as well as attend San Jacinto College classroom and laboratory classes where they will work on Chrysler products.

Each student must furnish a prescribed set of hand tools and be prepared to upgrade required tools as the program progresses. All tuition, fees, and textbook costs are the responsibility of the student. Interested students should visit www.sanjac.edu/autotech and fill out the electronic application or contact the automotive technology department. Registration for classes is limited to the Fall term each year.

Program Criteria

All candidates registering for the Chrysler CAP at San Jacinto College must apply electronically at www.sanjac.edu/autotech or contact the automotive technology department in order to be added to the prospective student list and be approved by the automotive department chair.

- Students who are not sponsored by a Chrysler, Dodge or Jeep dealership will not be allowed to register.
- Students must have a reading, writing and math skill level of 7-7-7 by the start of the program. Candidates not meeting the 7-7-7 skill level will require special action plans and advisement by the automotive department chair.
- Students must maintain sponsorship of the Chrysler dealership to avoid being withdrawn from the Chrysler CAP classes.
- Students unable to adhere to the Chrysler CAP degree plan will be put on departmental probation.
- Students on departmental probation are required to meet with the automotive department chair to discuss an action plan prior to registering for the next semester. Students will submit an action plan to the automotive programs manager identifying course deficiencies and a strategy for correcting these deficiencies during the following term(s). The program manager must approve all action plans.

- Students failing to enroll in and successfully complete classes submitted in the approved action plan will be withdrawn from Chrysler CAP classes.
- Students enrolled in Chrysler CAP classes must have a valid driver's license and be insurable.
- Students enrolled in Chrysler CAP must wear the dealer-provided uniform and be neatly groomed when working at the dealership and when attending all college classes.
- Students must complete a minimum of four (4) Automotive Service Excellence (ASE) certifications to be eligible for graduation.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity	1
	14

Second Term	Credit
AUMT 1419–Automotive Engine Repair	4
AUMT 2311–Automotive Electronic Controls	3
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician	3
ENGL 1301–Composition I	3
Speech	3
	16

PostY1Summer	Credit
AUMT 1345–Automotive Heating and Air Conditioning	3
AUMT 2313–Automotive Drive Train and Axles	3
AUMT 1280–Cooperative Education–Automobile/Automotive Mechanics Technology/Technician	2
	8

Third Term	Credit
AUMT 1316–Automotive Suspension and Steering Systems	3
AUMT 2425–Automotive Automatic Transmission and Transaxle	4
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician	3
ENGL 2311–Technical Report Writing	3
*Behavioral or Social Science	3
	16

Technical Programs

Fourth Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 2417–Automotive Engine Performance Analysis I	4
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician	3
PHED Activity	1
*Humanities or Fine Arts	3
	16

Associate of Applied Science Total **68**

**College Preparatory courses (those courses beginning with 0)
do not apply toward the associate degree.**

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

**Capstone Experience: AUMT 2388 or National A.S.E.
Certification Exams**

Honda Professional Automotive Career Training (PACT) (3AUTO-H)

Associate of Applied Science Degree

Central Campus

The Honda Professional Automotive Career Training (PACT) program is a two-year automotive program designed to teach technical competence and professional level skills to incoming technicians. The curriculum has been co-designed by Honda and San Jacinto College to lead to an Associate of Applied Science in Automotive Technology. The program requires the student to work at a Honda repair facility as well as attend San Jacinto College classroom and laboratory classes, where the student will work on donated training vehicles. Each student must furnish a prescribed basic hand-tool set and be prepared to upgrade the required tools as the program progresses. All tuition, fees and textbook costs are the responsibility of the student. Interested students should contact the College automotive technology department for an information packet. Registration for beginning students is limited to the Fall term of each year.

Program Criteria

All candidates registering for the program at San Jacinto College must apply in the automotive technology department and be approved by the automotive department chair.

- Students who are not sponsored by a Honda dealership will not be allowed to register for Honda PACT classes.
- Students must maintain sponsorship by the Honda dealership to avoid being withdrawn from Honda PACT classes.
- Students unable to adhere to the Honda PACT degree plan will be placed on departmental probation.
- Students placed on department probation are required to meet with the automotive department chair to discuss an action prior to registering for the next term. Students will submit an action to the automotive department chair identifying course deficiencies during the following term(s).

The automotive department chair must approve action plans.

- Students failing to enroll in and successfully complete the classes submitted in the approved action will be withdrawn from Honda PACT classes.
- Students enrolled in Honda PACT must have a valid driver's license and be insurable.
- Students enrolled in the Honda PACT must wear the dealer-provided uniform when working at the dealership and when attending Honda PACT classes.
- Students must complete a minimum of four (4) Automotive Service Excellence (ASE) certifications to be eligible for graduation.
- Students must complete 150 self-study modules to be eligible for graduation.

First Term Credit

AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
PHED Activity	1
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
AUMT 1419–Automotive Engine Repair	4
	18

Second Term Credit

AUMT 2311–Automotive Electronic Controls	3
AUMT 2321–Automotive Electrical and Lighting Accessories	3
ENGL 1301–Composition I	3
Speech	3
	12

PostY1Summer Credit

AUMT 1316–Automotive Suspension and Steering Systems	3
AUMT 1345–Automotive Heating and Air Conditioning	3
	6

Third Term Credit

AUMT 2313–Automotive Drive Train and Axles	3
AUMT 2417–Automotive Engine Performance Analysis I	4
AUMT 2388– Internship–Automobile/Automotive Mechanics Technology/Technician	3
ENGL 2311–Technical Report Writing	3
*Behavioral or Social Science	3
	16

Technical Programs

Fourth Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 2425–Automotive Automatic Transmission and Transaxle	4
AUMT 2388– Internship–Automobile/Automotive Mechanics Technology/Technician	3
PHED Activity	1
*Humanities or Fine Arts	3
	14

Associate Degree Total **66**

College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.*

Capstone Experience: AUMT 2388 or National A.S.E. Certification Exam

Honda Professional Automotive Career Training (PACT) (4AUTO-H)

Certificate of Technology

Central Campus

This is a one-year certificate program designed for students who would like to get a job as an automotive diagnostic technician for Honda in a short period of time. Students working toward this certificate are restricted to taking only the automotive courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. Should students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
AUMT 2311–Automotive Electronic Controls	3
AUMT 1419–Automotive Engine Repair	4
AUMT 2321–Automotive Electrical and Lighting Accessories.....	3
	17

Second Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 2313–Manual Drive Train and Axles	3
AUMT 2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
AUMT 2417–Automotive Engine Performance Analysis I.....	4
AUMT 2425–Automatic Transmission and Transaxle.....	4
	17

PostY1Summer	Credit
AUMT 1345–Automotive Heating and Air Conditioning	3
AUMT 1316–Automotive Suspension and Steering Systems.....	3
AUMT 1280–Cooperative Education - Autobody Collision and Repair Technology/Technician	2
	8
Certificate of Technology Total	42

Capstone Experience: AUMT 2388 or National A.S.E. Certification Exams

** College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.*

Honda Professional Automotive Career Training (PACT) – Maintenance and Light Repair (4AUTO-HM)

Certificate of Technology

The Honda Professional Automotive Career Training (PACT) maintenance and light repair program is a one-year certificate program designed for students who would like work in the express lube service field for a Honda dealership. Students working toward this certificate are restricted to taking only the courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. Should students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
AUMT 2388– Internship–Automobile/Automotive Mechanics Technology/Technician	3
AUMT 1316–Automotive Suspension and Steering Systems.....	3
	13

Second Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 2388– Internship–Automobile/Automotive Mechanics Technology/Technician	3
AUMT 1345–Automotive Heating and Air Conditioning	3
	9
Certificate of Technology Total	22

Capstone Experience: AUMT 2388 or National A.S.E. Certification Exams

** Students enrolling in the Maintenance and Light Repair Certificate of Technology program must be sponsored by an approved automotive dealer or fleet repair facility and maintain all employment requirements.*

Technical Programs

Ford Motor Company Automotive Student Service Educational Training (ASSET) Ford Specialty (3AUTO-F)

Associate of Applied Science Degree

Central Campus

Ford Motor Company Automotive Student Service Educational Training (ASSET) is a two-year automotive program designed to teach technical competency skills and professionalism for the incoming technician. The curriculum is designed by Ford and San Jacinto College and leads to an Associate of Applied Science in Automotive Technology. The program requires students to work at Ford or Lincoln/Mercury dealerships as well as attend San Jacinto College classroom and laboratory classes, where they will work on donated training vehicles.

Each student must furnish a prescribed basic hand-tool set and be prepared to upgrade required tools as the program progresses. All tuition, fees, and textbook costs are the responsibility of the student. Interested students should contact the College automotive technology department for an information packet. Registration for beginning students is limited to the Fall term of each year.

Program Criteria:

All candidates registering for the Ford ASSET program at San Jacinto College must apply in the automotive technology department and be approved by the automotive department chair.

- Students who are not sponsored by a Ford ASSET dealership will not be allowed to register for Ford ASSET classes.
- Students must maintain sponsorship by the Ford dealership to avoid being withdrawn from Ford ASSET classes.
- Students unable to adhere to the Ford ASSET degree plan will be placed on departmental probation.
- Students placed on departmental probation are required to meet with the automotive department chair to discuss an action plan prior to registering for the next term. Students will submit an action plan to the automotive department chair, identifying course deficiencies during the following term(s). The automotive department chair must approve all action plans.
- Students failing to enroll in and successfully complete the classes submitted in the approved action plan will be withdrawn from Ford ASSET classes.
- Students enrolled in Ford ASSET must have a valid driver's license and be insurable.
- Students enrolled in Ford ASSET must wear a dealer-provided uniform when working at the dealership and when attending Ford ASSET classes.

- Students must complete a minimum of four (4) Automotive Service Excellence (ASE) certifications to be eligible for graduation.

First Term	Credit
AUMT1305–Introduction to Automotive Technology	3
AUMT1407–Automotive Electrical Systems	4
AUMT2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity	1
	14

Second Term	Credit
AUMT1419–Automotive Engine Repair	4
AUMT2311–Automotive Electronic Controls	3
AUMT2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
ENGL1301–Composition I	3
Speech	3
	16

PostY1Summer	Credit
AUMT1345–Auto Heat and Air Conditioning	3
AUMT1280–Cooperative Education - Auto	2
AUMT1310–Automotive Brake Systems	3
	8

Third Term	Credit
AUMT2417–Auto Engine Perform Analysis I	4
AUMT2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
ENGL2311–Technical Report Writing	3
**Behavioral or Social Science	3
AUMT1316–Auto Suspension and Steering	3
	16

Technical Programs

General Motors Automotive Service Educational Program (ASEP) (3AUTO-G)

Associate of Applied Science Degree

Central Campus

The General Motors Automotive Service Educational Program (ASEP) is a two-year automotive program designed to teach technical competence and professional level skills to incoming technicians. The curriculum has been co-designed by General Motors and San Jacinto College to lead to an Associate of Applied Science in Automotive Technology. The program requires students to work at General Motors dealerships, as well as attend San Jacinto College classroom and laboratory classes where they will work on General Motors' products.

Each student is required to furnish a prescribed basic hand-tool set and be prepared to upgrade required tools as the program progresses. All tuition, fees, and textbook costs are the responsibility of the student. Interested students should contact the automotive technology department for an information packet. Registration for beginning students is limited to the Fall term of each year.

Program Criteria

All candidates registering for the GM ASEP program at San Jacinto College must apply in the automotive technology department office and be approved by the department chair.

- Students who are not sponsored by a GM dealership will not be allowed to register for GM ASEP classes.
- Students must maintain sponsorship of the GM dealership to avoid being withdrawn from GM ASEP classes.
- Students unable to adhere to the GM ASEP degree plan will be placed on departmental probation.
- Students placed on departmental probation are required to meet with the automotive department chair to discuss an action plan prior to registering for the next term. Students will submit an action plan to the automotive department chair identifying course deficiencies and a strategy for correcting these deficiencies during the following term(s). The department chair must approve all action plans.
- Students failing to enroll in and successfully complete the classes submitted in the approved action plan will be withdrawn from GM ASEP classes.
- Students enrolled in GM ASEP must have and maintain a valid driver's license and be insurable.
- Students enrolled in GM ASEP must wear a dealer-provided uniform when working at the dealership and when attending GM ASEP classes.
- Students must complete a minimum of four (4) Automotive Service Excellence (ASE) certifications to be eligible for graduation.

Fourth Term	Credit
AUMT2313–Manual Drive Train and Axles	3
AUMT2425–Auto Transmission and Transaxle	4
AUMT2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
PHED Activity	1
**Humanities or Fine Arts	3

Associate of Applied Science Degree Total **14**

Capstone Experience: AUMT 2388 or National A.S.E. **68**

Certification Exams

* College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

At registration, students will be required to pay \$350 to Ford Motor Company for books and administrative fees.

Automotive Technology – Ford Specialty Maintenance and Light Repair (6AUTO-F)

Occupational Certificate*

Central Campus

The Ford Motor Company Maintenance and Light Repair Occupational Certificate is a one-term occupational certificate program for students who would like to work in the express lube service field for a Ford Motor Company dealership. Students working toward this certificate are restricted to taking only the courses listed in the outline below. Should students decide to continue their education, the courses may then be applied toward a certificate of technology or an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction of Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
AUMT 1310–Automotive Braking Systems	3
AUMT 1316–Automotive Suspension and Steering	3
AUMT 1345–Automotive Heating and Air Conditioning	3

Ford Maintenance and Light Repair Certificate Total **16**

Capstone Experience: National A.S.E. Certification Exams

* Students enrolling in the Maintenance and Light Repair Occupational Certificate Program must be sponsored by an approved automotive Ford dealer or fleet repair facility and maintain all employment requirements.

At registration, students will be required to pay \$350 to Ford Motor Company for books and administrative fees.

Technical Programs

First Term	Credit
AUMT 1305—Introduction to Automotive Technology	3
AUMT 1407—Automotive Electrical Systems	4
AUMT 2388—Internship—Automobile/Automotive Mechanics Technology/Technician	3
*MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3
PHED Activity	1
	14

Second Term	Credit
AUMT 1419—Automotive Engine Repair	4
AUMT 2311—Automotive Electronic Controls	3
AUMT 2388—Internship—Automobile/Automotive Mechanics Technology/Technician	3
ENGL 1301—Composition I	3
Speech	3
	16

PostY1 Summer	Credit
AUMT 1345—Automotive Heating and Air Conditioning	3
AUMT 1280—Cooperative Education—Automobile/ Automotive Mechanics Technology/Technician	2
AUMT 1316—Auto Suspension and Steering Systems	3
	8

Third Term	Credit
AUMT 2388—Internship—Automobile/Automotive Mechanics Technology/Technician	3
ENGL 2311—Technical Report Writing	3
**Behavioral or Social Science	3
AUMT 2313—Automotive Manual Drive Train and Axles	3
AUMT 2425—Automatic Transmission and Transaxle	4
	16

Fourth Term	Credit
AUMT 2417—Automotive Engine Performance Analysis I	4
AUMT 1310—Automotive Brake Systems	3
AUMT 2388—Internship—Automobile/Automotive Mechanics Technology/Technician	3
**Humanities or Fine Arts	3
PHED Activity	1
	14

Associate of Applied Science Degree Total **68**

Capstone Experience: AUMT 2388 or National A.S.E.

Certification Exams

* College Preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Automotive Technology Toyota Technical Education Network (TTEN) (3AUTO-T)

Associate of Applied Science Degree

Central Campus

The Toyota Technical Education Network (TTEN) program is a two-year automotive program designed to teach technical competence and professional level skills to incoming dealership technicians. The curriculum has been designed by Toyota Motors, Inc./Lexus and San Jacinto College to lead to an Associate of Applied Science in Automotive Technology. The program requires the student to work at a Toyota/Lexus repair facility, as well as attend San Jacinto College classroom and laboratory classes where the student will work on donated training vehicles.

Each student must furnish a prescribed basic hand-tool set and be prepared to upgrade required tools as the program progresses. All tuition, fees, and textbook costs are the responsibility of the student. Interested students should contact the College automotive technology department for an information packet. Registration for beginning students is limited to the Fall term of each year.

Program Criteria

All candidates registering for the Toyota TTEN program at San Jacinto College must apply in the automotive technology department office and be approved by the department chair.

- Students who are not sponsored by a Toyota or Lexus dealership will not be allowed to register for Toyota TTEN classes.
- Students must maintain sponsorship of the Toyota or Lexus dealership to avoid being withdrawn from Toyota TTEN classes.
- Students unable to adhere to the Toyota TTEN degree plan will be placed on departmental probation.
- Students placed on departmental probation are required to meet with the automotive department chair to discuss an action plan prior to registering for the next term. Students will submit an action plan to the automotive technology department chair identifying course deficiencies and a strategy for correcting these deficiencies during the following term(s). The department chair must approve all action plans.
- Students failing to enroll in and successfully complete the classes submitted in the approved action plan will be withdrawn from Toyota TTEN classes.
- Students enrolled in Toyota TTEN must maintain a valid driver's license and be insurable.
- Students enrolled in Toyota TTEN must wear the dealer-provided uniform when working at the dealership and when attending Toyota TTEN classes.

Technical Programs

- Students must complete a minimum of four (4) Automotive Service Excellence (ASE) certifications to be eligible for graduation.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	3
AUMT 1407–Automotive Electrical Systems	4
PHED Activity	1
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software	3
AUMT 1419–Automotive Engine Repair	4
	14

Second Term	Credit
AUMT 2311–Automotive Electronic Controls	3
AUMT 2321–Automotive Electrical Lighting and Accessories	3
Speech	3
ENGL 1301–Composition I	3
	16

PostY1Summer	Credit
AUMT 1316–Automotive Suspension and Steering Systems	3
AUMT 1345–Automotive Heating and Air Conditioning	3
	6

Third Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 2425–Automotive Transmission and Transaxle	4
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician	3
ENGL 2311–Technical Report Writing	3
**Behavioral or Social Science	3
	16

Fourth Term	Credit
AUMT 2313–Automotive Drive Train and Axles	3
AUMT 2417–Automotive Engine Performance Analysis I	4
AUMT 2388–Internship–Automobile/Automotive Mechanics Technology/Technician	3
PHED Activity	1
**Humanities or Fine Arts	3
	14

Associate of Applied Science Degree Total **66**

Capstone Experience: AUMT 2388 or National A.S.E.

Certification Exams

* College Preparatory courses (those beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Automotive Technology Toyota Technical Education Network (TTEN) (4AUTO-T)

Certificate of Technology

Central Campus

The Toyota Technical Education Network (TTEN) Certificate of Technology is designed for students who would like to work as a Toyota diagnostic technician in a shorter period of time. Students working toward this certificate are restricted to taking only the automotive courses listed in the outline below. Upon completion of the required courses, students are eligible to participate in graduation exercises with degree students. Should students decide to continue their education, the courses may then be applied toward an associate of applied science degree.

First Term	Credit
AUMT 1305–Introduction to Automotive Technology	4
AUMT 1407–Automotive Electrical Systems	4
AUMT 2311–Automotive Electronic Controls	3
AUMT 2321–Automotive Electrical Lighting and Accessories	3
AUMT 1419–Automotive Engine Repair	4
	1

Second Term	Credit
AUMT 1310–Automotive Brake Systems	3
AUMT 2425–Automotive Automatic Transmission and Transaxle	4
AUMT 2313–Automotive Manual Drive Train and Axles	3
AUMT 2417–Automotive Engine Performance Analysis I	4
AUMT 2388–Internship - Automobile/Automotive Mechanics Technology/Technician	3
	17

PostY1Summer	Credit
AUMT 1345–Automotive Heating and Air Conditioning	3
AUMT 1316–Automotive Suspension and Steering Systems	3
AUMT 1280–Cooperative Education - Autobody Collision and Repair Technology/Technician	2
	8

Certificate of Technology Total **42**

Capstone Experience: AUMT 2388 or National A.S.E.

Certification Exam

Note: Students enrolling in this certificate must pass the Mechanical Aptitude Test and pass an interview with the lead Toyota/Lexus instructor.

Technical Programs

Business Management

All Campuses

Business management is a two-year supervisory training program that combines classroom management theory with practical on-the-job training. The program leads to the Associate of Applied Science in Business Management. The business management curriculum includes courses designed to provide a practical, comprehensive program covering managerial activities. The program is designed to meet the needs of people preparing for careers in business and industry such as retailing, wholesaling, industrial management, small business, and human resources. The business management program supports the theory that there is no substitute for world-of-work experience in the learning process. Management course work includes studies in basic principles of management, human relations, group dynamics, motivation of individuals and groups, leadership development, organization of work and people, study of supervisory functions, and many other management interests, including international business and trade.

A Contemporary Approach to Management Training

Concurrent with the business management courses, the supervision major or the small business entrepreneur major is required to take a practicum which coordinates job training with classroom theory. One of the requirements of the practicum course is that a student work a minimum of 20 hours per week at a training station approved by a business management coordinator. Designed as a development tool, the practicum requires that the business management coordinator, the employer, and the student agree on a tentative training outline or personal development plan which, according to specific guidelines, must improve, enhance, and demonstrate personal and professional managerial skills of the student at work.

Note: Students taking the practicum courses should be counseled by a business management coordinator or the department chair prior to registration. BMGT 2368 can be taken more than once for credit; consequently, the credit for this course, when taken more than once, may be applied toward the certificate of technology and toward the degree. This practicum helps the student receive practical training and experience compatible with his or her management career objective.

Management Specialty (3BMGT-MGMT)

Associate of Applied Science Degree

All Campuses

The Associate of Applied Science in Business Management is an accelerated two-year supervisory training program for people preparing for careers in business management. Students pursuing a bachelor's degree should see a counselor or the business department chair prior to registration.

First Term	Credit
BCIS 1305—Computer Applications.....	3
HRPO 1311—Human Relations.....	3
BMGT 1301—Supervision	3
BMGT 1313—Principles of Purchasing	3
MRKG 2333—Principles of Selling.....	3

15

Second Term	Credit
BMGT 2309—Leadership	3
BMGT 1327—Principles of Management.....	3
BMGT 1331—Production and Operations Management	3
BMGT 2368—Practicum (or Field Experience) Business Administration and Management	3
HRPO 2301—Human Resources Management	3
MRKG 1311—Principles of Marketing.....	3

18

Third Term	Credit
ENGL 1301—Composition I	3
SPCH 1315—Public Speaking or 1321—Business and Professional Speech	3
BUSI 2304—Business Communications.....	3
BMGT 2368—Practicum (or Field Experience) Business Administration and Management	3
BUSG 2309—Small Business Management	3
PHED Activity	1

16

Fourth Term	Credit
Economics or Psychology or Sociology.....	3
ENGL 2311—Technical Report Writing or ENGL—1302 English Composition II.....	3
ACCT 2301—Accounting Principles I or ACNT—1303 Introduction to Accounting I.....	3
MATH 1314—College Algebra or MATH 1333—Contemporary Mathematics for Technical Programs	3
*Humanities or Fine Arts	3
PHED Activity	1

16

Associate of Applied Science Degree Total 65
Capstone Experience: BMGT 2368

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Technical Programs

Management Specialty (4BMGT-MGMT)

Certificate of Technology

All Campuses

The Management Specialty Certificate of Technology is designed for students who desire to earn a credential after one year of study. All courses required for the Certificate of Technology apply toward an Associate of Applied Science in Business Management.

First Term	Credit
BCIS 1305–Business Computer Applications	3
HRPO 1311–Human Relations.....	3
BMGT 1301–Supervision	3
BMGT 1313–Principles of Purchasing	3
MRKG 2333–Principles of Selling.....	3
	15
Second Term	Credit
BMGT 1327–Principles of Management.....	3
BMGT 1331–Production and Operations Management	3
BMGT 2309 –Leadership	3
HRPO 2301–Human Resources Management	3
BMGT 2368–Field Experience (Practicum) Business Administration and Management	3
	15
Certificate of Technology Total	30
Capstone Experience: BMGT 2368	

Management Specialty (6BMGT-MGMT)

Occupational Certificate

All Campuses

First Term	Credit
BMGT 2309–Leadership or BMGT 1313–Principles of Purchasing	3
HRPO 1311–Human Relations.....	3
HRPO 2301–Human Resources Management	3
MRKG 2333–Principles of Selling.....	3
BMGT 1301–Supervision	3
Certificate of Technology Total	15
Capstone Experience: HRPO 2301	

Small Business Entrepreneur Specialty (3BMGT-ENTR)

Associate of Applied Science Degree

All Campuses

The Small Business Entrepreneur Specialty is suitable for anyone who desires to own or manage a small business. This two-year degree program has been recommended by an advisory committee of small business owners. Students pursuing a bachelor's degree should see a counselor or the business department chair prior to registration.

First Term	Credit
ACNT 1303–Introduction to Accounting I or ACCT 2301–Accounting Principles I.....	3
BCIS 1305–Business Computer Applications.....	3
BUSI 2301–Business Law I.....	3
BUSG 2309–Small Business Management	3
BMGT 1301–Supervision	3
HRPO 1311–Human Relations.....	3
	18
Second Term	Credit
ACNT 1311–Introduction to Computerized Accounting or ACCT 2302–Accounting Principles II	3
HRPO 2301–Human Resources Management	3
MRKG 1311–Principles of Marketing.....	3
MRKG 2333–Principles of Selling.....	3
BMGT 1391–Special Topics in Business and Management.....	3
	15
Third Term	Credit
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
BMGT 2309–Leadership	3
ENGL 1301–Composition I	3
BMGT 2368–Practicum (or Field Experience) Business Administration and Management	3
Economics or Psychology or Sociology.....	3
PHED Activity	1
	16
Fourth Term	Credit
ENGL 2311–Technical Report Writing or ENGL 1302–English Composition II	3
BUSI 2304–Business Communications.....	3
BMGT 2368–Practicum (or Field Experience) Business Administration and Management	3
SPCH 1315–Public Speaking or 1321–Business and Professional Speech	3
*Humanities or Fine Arts	3
PHED Activity	3
	16
Associate of Applied Science Degree Total	65
Capstone Experience: BMGT 2368	

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Technical Programs

Technical Programs

Small Business Entrepreneur Specialty (4BMGT-ENTR)

Certificate of Technology

All Campuses

The Small Business Entrepreneur Certificate of Technology is designed for students who desire to earn a credential after one year of study. All courses required for the certificate of technology may apply toward the Small Business Entrepreneur Associate of Applied Science.

First Term	Credit
BCIS 1305–Business Computer Applications.....	3
HRPO 1311–Human Relations.....	3
BMGT 1301–Supervision	3
MRKG 1311–Principles of Marketing.....	3
MRKG 2333–Principles of Selling.....	3
	15

Second Term	Credit
ACNT 1303–Introduction to Accounting I or ACCT 2301–Accounting Principles I.....	3
BUSG 2309–Small Business Management	3
HRPO 2301–Human Resources Management	3
BUSI 2301–Business Law I	3
BMGT 2368–Practicum (or Field Experience) Business Administration and Management	3
	15

Certificate of Technology Total **30**
Capstone Experience: BMGT 2368

E-Commerce Management (6MGT-ECOM)

Occupational Certificate

All Campuses

First Term	Credit
BMGT 1391–Special Topics in Business Adm & Management	3
MRKG 2312–e-Commerce Marketing	3
HRPO 1311–Human Relations.....	3
IMED 1316–Web Design I or ITSC 1319–Internet/Web Page Development.....	3
MRKG 1311–Principles of Marketing or BMGT 1313–Principles of Purchasing	3
	15

Occupational Certificate Total **15**
Capstone Experience: MRKG 2312

Foundations of Marketing Specialty (6BMGT-MRKG)

Occupational Certificate

All Campuses

First Term	Credit
BMGT 1301–Supervision	3
HRPO 1311–Human Relations.....	3
MRKG 1311–Principles of Marketing.....	3
MRKG 2333–Principles of Selling.....	3
MRKG 2312–e-Commerce Marketing	3
	15

Occupational Certificate Total **15**
Capstone Experience: MRKG 2312

Management (MBMGT-MGMT)

Marketable Skills Achievement Award

All Campuses

BMGT 1313–Principles of Purchasing or BMGT 1325–Office Management.....	3
BMGT 1301–Supervision	3
BMGT 2368–Practicum/Field Experience	3
HRPO 1311–Human Relations.....	3
	12

Business Office Technology

Executive/Administrative Assistant Specialty (3BOFT-EXE)

Associate of Applied Science Degree

All Campuses

This two-year business office technology program leading to an associate of applied science degree is for students preparing for jobs as executive/administrative assistants. Students desiring a bachelor's degree should see a counselor or the business department chair prior to registration.

Keyboarding proficiency is recommended for the certificate programs. Students who do not have keyboarding proficiency are encouraged to take POFT 1329 or POFT 1127.

First Term	Credit
BCIS 1305 Business Computer Applications.....	3
BUSI 1304–Business Report Writing and Correspondence.....	3
POFT 1319–Records and Information Management I.....	3
POFT 2301–Intermediate Keyboarding.....	3
HRPO 1311–Human Relations.....	3
	15

Technical Programs

Second Term	Credit
ACNT 1303–Introduction to Accounting I.....	3
POFT 1309–Administrative Office Procedures I.....	3
POFI 1341–Computer Applications II.....	3
POFT 1325–Business Math and Machine Applications.....	3
POFT 1328–Introduction Presentations.....	3
POFI 2331–Desktop Publishing for the Office.....	3

18

Third Term	Credit
ACNT 1304–Introduction to Accounting II.....	3
BMGT 1341 Business Ethics.....	3
BUSI 1301 Introduction to Business.....	3
BUSI 2304–Business Communications.....	3
ENGL 1301–Composition I.....	3
PHED Activity.....	1

16

Fourth Term	Credit
POFT 2364–Practicum.....	3
Psychology or Sociology.....	3
SPCH 1315–Public Speaking or 1321–Business and Professional Speech.....	3
MATH 1333–Contemporary Mathematics or MATH 1314 College Algebra.....	3
*Humanities or Fine Arts.....	3
PHED Activity.....	1

16

Associate of Applied Science Degree Total 65

Capstone Experience: POFT 2364

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Executive/Administrative Assistant Specialty (4BOFT-E)

Certificate of Technology

All Campuses

These courses are required for the Executive/Administrative Assistant Certificate of Technology and also qualify as the first two terms of the associate of applied science degree.

First Term	Credit
BCIS 1305–Business Computer Applications.....	3
POFT 1319–Records and Information Management I.....	3
BUSI 1304–Business Report Writing and Correspondence.....	3
POFT 2301–Intermediate Keyboarding.....	3
HRPO 1311–Human Relations.....	3

15

Second Term	Credit
ACNT 1303–Introduction to Accounting I.....	3
POFT 1309–Administrative Office Procedures I.....	3
POFI 1341–Computer Applications II.....	3
POFT 1325–Business Math and Machine Applications.....	3
POFT 1328–Business Presentations.....	3
POFI 2331–Desktop Publishing.....	3

18

Certificate of Technology Total 33

Capstone Experience: POFI 2301

Legal Administrative Assistant Specialty (3BOFT-LGL)

Associate of Applied Science Degree

All Campuses

This two-year business office technology program leading to an associate of applied science degree is for students preparing for jobs as legal secretaries. Students desiring a bachelor's degree should see a counselor or the business department chair prior to registration.

First Term	Credit
ACNT 1303–Introduction to Accounting I.....	3
BUSI 1304–Business Report Writing and Correspondence.....	3
BCIS 1305–Business Computer Applications.....	3
POFT 1319–Records and Information Management I.....	3
POFT 2301–Intermediate Keyboarding.....	3

15

Second Term	Credit
POFT 1309–Administrative Office Procedures I.....	3
POFT 1325–Business Math and Machine Applications.....	3
POFI 1341–Computer Applications II.....	3
POFT 1328–Business Presentations.....	3
POFL 1305–Legal Terminology.....	3
BMGT 1341–Business Ethics.....	3

18

Third Term	Credit
BUSI 2304–Business Communications.....	3
POFL 2301–Legal Document Processing.....	3
BUSI 2301–Business Law I.....	3
HRPO 1311–Human Relations.....	3
ENGL 1301–Composition I.....	3
PHED Activity.....	1

16

Technical Programs

Fourth Term	Credit
POFT 2364–Practicum (or Field Experience) - Administrative Assistant and Secretarial Science General	3
SPCH 1315–Public Speaking or SPCH 1321–Business and Professional Speech	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
Psychology or Sociology	3
*Humanities or Fine Arts	3
PHED Activity	1
	16
Associate of Applied Science Degree Total	65

Capstone Experience: POFT 2364

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Legal Administrative Assistant Specialty (4BOFT-L)

Certificate of Technology

These courses are required for the Legal Administrative Assistant Specialty Certificate of Technology and also qualify as the first two terms of the associate of applied science degree.

First Term	Credit
ACNT 1303–Introduction to Accounting I	3
BUSI 1304–Business Report Writing and Correspondence	3
BCIS 1305–Business Computer Applications	3
POFT 1319–Records and Information Management I	3
POFT 2301–Intermediate Keyboarding	3
	15
Second Term	Credit
POFT 1309–Administrative Office Procedures I	3
POFT 1305–Legal Terminology	3
POFT 1325–Business Math and Machine Applications	3
POFI 1341–Computer Applications II	3
POFT 1328–Business Presentations	3
BMGT 1341–Business Ethics	3
	18
Certificate of Technology Total	33
Capstone Experience: POFL 1305	

Medical Administrative Assistant Specialty (3BOFT-M)

Associate of Applied Science Degree

All Campuses

This two-year business office technology program leading to an associate of applied science degree is for students preparing for jobs as medical administrative assistants. Students desiring a bachelor's degree should see a counselor or the business office technology department chair prior to registration.

First Term	Credit
ACNT 1303–Introduction to Accounting I	3
BCIS 1305–Business Computer Applications	3
POFM 1371–Medical Terminology	3
BUSI 1304–Business Report Writing and Correspondence	3
POFT 1319–Records and Information Management I	3
	15
Second Term	Credit
ACNT 1304–Introduction to Accounting II	3
POFt 1309–Administrative Office Procedures I	3
MRMT 1307–Medical Transcription I	3
POFT 1325–Business Math and Machine Applications	3
POFT 2301–Document Formatting and Skillbuilding	3
POFT 1328–Business Presentations	3
	18
Third Term	Credit
HRPO 1311–Human Relations	3
BUSI 2304–Business Communications	3
ENGL 1301–Composition I	3
BMGT 1341–Business Ethics	3
POFM 1327–Medical Insurance or MDCA 1343 Medical Insurance	3
PHED Activity	1
	16
Fourth Term	Credit
POFT 2364–Practicum	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
SPCH 1315–Public Speaking or SPCH 1321–Business and Professional Speech	3
*Humanities or Fine Arts	3
Psychology or Sociology	3
PHED Activity	1
	16
Associate of Applied Science Degree Total	65
Capstone Experience: POFT 2364	

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Medical Administrative Assistant Specialty (4BOFT-M)

Certificate of Technology

All Campuses

These courses are required for the Medical Administrative Assistant Specialty Certificate of Technology and also qualify as the first two terms of the associate of applied science degree.

First Term	Credit
ACNT 1303–Introduction to Accounting I.....	3
BUSI 1304–Business Report Writing and Correspondence.....	3
BCIS 1305–Business Computer Applications.....	3
POFM 1371–Medical Terminology.....	3
POFT 1319–Records and Information Management I.....	3
	15

Second Term	Credit
ACNT 1304–Introduction to Accounting II.....	3
POFT 1309–Administrative Office Procedures I.....	3
POFT 1325–Business Math and Machine Applications.....	3
POFT 2301–Intermediate Keyboarding.....	3
POFT 1328–Business Presentations.....	3
MRMT 1307–Medical Transcription I.....	3
	18

Certificate of Technology Total **33**

Capstone Experience: MRMT 1307

Business Software Specialty (4BOFT-SW)

Certificate of Technology

All campuses

First Term	Credit
BCIS 1305–Business Computer Applications.....	3
BUSI 1304–Business Report Writing and Correspondence.....	3
POFT 2301 Intermediate Keyboarding.....	3
HRPO 1311–Human Relations.....	3
	12

Second Term	Credit
POFI 1341–Computer Applications II.....	3
POFI 2331–Desktop Publishing for the Office.....	3
POFT 1328–Business Presentations.....	3
BMGT 1341–Business Ethics.....	3
	12

Certificate of Technology Total **24**

Capstone Experience: POFI 1349

Technical Programs

General Office Clerk (6BOFT-CL)

Occupational Skills Certificate

All Campuses

This short certificate program is designed for students who need entry-level skills to begin working in an office. All courses in this program except POFT 1329 also apply toward two Business Office Technology Certificates of Technology and the associate of applied science degree.

First Term	Credit
BUSI 1304–Business Report Writing and Correspondence.....	3
BCIS 1305–Business Computer Applications.....	3
POFT 1319–Records and Information Management I.....	3
POFT 1325–Business Math and Machine Applications.....	3
POFT 2301–Intermediate Keyboarding.....	3

Occupational Certificate Total **15**

Business Office Technology

Marketable Skills Achievement Certificates

All Campuses

Each of these certificate programs are designed to provide entry-level skills, and to be a foundation for completing a higher-level certificate or degree. Students must complete all the courses in a certificate program within three years and make a grade of C or better in each course. Application for these certificates should be made in the business administration department office.

Business Office Technology Marketable Skills Achievement Award Accounting Specialty (MBOTA)

All Campuses

The Accounting Specialty Marketable Skills Achievement Award is designed to provide entry-level skills, and to be a foundation for completing a higher-level certificate or degree. Students must complete all course in a certificate program within three years and make a grade of C or better in each course. Application for these should be made in the Office of Enrollment Services.

First Term	Credit
POFT 1349 or BCIS 1305.....	3
ACNT 1303–Introduction to Accounting I.....	3
ACNT 1304–Introduction to Accounting II.....	3
ACNT 1311–Intro to Computerized Acct.....	3

12

Technical Programs

Business Office Technology Marketable Skills Achievement Award General Office Specialty (MBOTG)

All Campuses

The General Office Specialty Marketable Skills Achievement Award is designed to provide entry-level skills, and to be a foundation for completing a higher-level certificate or degree. Students must complete all the courses in a certificate program within three years and make a grade of C or better in each course. Application for these awards should be made to the Office of Enrollment Services.

First Term	Credit
BUSI 1304–Business Report Writing and Correspondence.....	3
POFT 1329–Keyboarding and Document Formatting	3
POFT 2301–Intermediate Keyboarding.....	3
POFT 1319–Records and Information Management I.....	3
	12
Marketable Skills Achievement Award Total	12

**Students who can demonstrate keyboarding proficiency are exempt from taking POFT 1329 and may substitute a course that is listed as a requirement in one of the Business Office Technology Certificates.*

Business Office Technology Marketable Skills Achievement Award Business Computer Applications Specialty (MBOTC)

All Campuses

The Business Computer Applications Marketable Skills Achievement Award is designed to provide entry-level skills, and to be a foundation for completing a higher-level certificate or degree. Students must complete all courses in a certificate program within three years and make a grade of C or better in each course. Application for these awards should be made in the Office of Enrollment Services.

First Term	Credit
BCIS 1305–Business Computer Applications.....	3
POFT 2301–Intermediate Keyboarding.....	3
POFT 1328–Business Presentations.....	3
POFI 1341–Computer Applications II.....	3
	12
Marketable Skills Achievement Award Total	12

Business Office Technology Marketable Skills Achievement Award Legal Administration Assistant Specialty (MBOTL)

All Campuses

The Legal Administrative Assistant Specialty Marketable Skills Achievement Award is designed to provide entry-level skills, and to be a foundation for completing a higher-level certificate or degree. Students must complete all course in a certificate program within three years and make a grade of C or better in each course. Application for these awards should be made in the Office of Enrollment Services.

First Term	Credit
BUSI 1304–Business Report Writing and Correspondence.....	3
BCIS 1305–Business Computer Applications I.....	3
POFL 2301–Legal Document Processing.....	3
POFT 2301–Intermediate Keyboarding.....	3
	12
Marketable Skills Achievement Award Total	12

Chemical Technology

See Process Technology

Child Development/ Early Childhood Education

Child Development/Early Childhood Education University Transfer Plan (1CHID)

Associate of Art Degree

Central and North Campuses

An associate of arts degree is available for students working toward a baccalaureate degree with teacher certification for early childhood education (EC–6th grade, effective Fall 2008). See the child development department chair or a counselor for more information.

Students who will pursue a four-year degree at a college or university should enroll in the associate of arts (A.A.) degree plan for a maximum of transferable credit. All students considering transfer should consult with a counselor regarding the specific requirements of various universities for this major.

Technical Programs

Child Development/Early Childhood Education (3CHID-ECE)

Associate of Applied Science Degree

This curriculum is designed to develop basic skills, attitudes and competencies necessary for personnel to provide high-quality care and early education in preschools and child care centers.

CDEC and TECA Student:

The 80th Texas Legislature passed a law, Senate Bill 758, that as of Sept. 1, 2007, requires a Federal Bureau of Investigation (FBI) fingerprint check for anyone who is currently required to have a background check in a child care center. This includes any person(s), including volunteers, who are counted in the child/caregiver ratio. Child care center employees/volunteers will have to have the background fingerprints once every two (2) years. Similar legislation, Senate Bill 9, set 2011 as the deadline for public school districts to be in compliance. FBI fingerprinting allows the state to check an individual's criminal record in 50 states, rather than just checking for a record within the state of Texas, which is all that our current system allows us to do. Additionally, it addresses concerns with individuals using fake names and social security numbers.

After some preliminary clarification, we have found that no student can be in any one location more than two (2) days a month, in which case they would not be a "frequent" in-contact person in the classroom. Our experience indicates that the area school districts are implementing criminal background checks in a variety of ways. A fee is required but may vary depending upon the center, program and school district. Based upon all this information, it is the student's responsibility as a future teacher of children in the state of Texas to understand and comply with the requirements of each institution in which they may observe and/or intern.

For further clarification, discuss any concerns or issues with your professor, counselor and/or department chair.

First Term	Credit
TECA 1354–Child Growth and Development or CDEC 1354–Child Growth and Development	3
CDEC 1319–Child Guidance.....	3
CDEC 1458–Creative Arts for Early Childhood	4
ENGL 1301–Composition I	3
CDEC 1359–Children with Special Needs.....	3
	16

Second Term	Credit
CDEC 1356–Emergent Literacy for Early Childhood	3
TECA 1311–Educating Young Children or CDEC 1311–Educating Young Children.....	3
CDEC 1413–Curriculum Resources for Early Childhood Program....	4
*Humanities or Fine Arts	3
CDEC 1323–Observation and Assessment	3
PHED Activity	3
	19

Third Term	Credit
CDEC 2407–Math and Science for Early Child.....	4
TECA 1303–Family, School and Community or CDEC 1303–Family, School and Community	3
SPCH 1315–Public Speaking or SPCH 1318–Interpersonal Communication	3
MATH 1314–College Algebra or MATH 1332–College Mathematics for Liberal Arts	3
CDEC 2326–Administration of Programs for Children I	3
	16

Fourth Term	Credit
TECA 1318–Wellness of the Young Child or CDEC 1318–Wellness of the Young Child	3
CDEC 2328–Administration Programs for Children II	3
CDEC 2366–Practicum (or Field Experience) Child Care Provider/Assistant.....	3
CDEC 2315–Diverse Cultural/Multilingual Education or Approved Elective.....	3
*Behavioral or Social Science	3
PHED Activity	1
	16

Associate of Applied Science Degree Total **65**

Capstone Experience: CDEC 2366

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives		
CDEC 1321	CDEC 1417	CDEC 2336
CDEC 2341	CDEC 2422	CDEC 2424
FMLD 1353	FMLD 1372	

Technical Programs

Child Development/Early Childhood Education (4CHID-ECE)

Certificate of Technology

Central and North Campuses

First Term	Credit
TECA 1354–Child Growth and Development or CDEC 1354–Child Growth and Development.....	3
CDEC 1319–Child Guidance.....	3
TECA 1311–Educating Young Children or CDEC 1311–Educating Young Children.....	3
CDEC 1413–Curriculum Resources for Early Childhood Programs ..	4
CDEC 1356–Emergent Literacy for Early Childhood.....	3
	16
Second Term	Credit
TECA 1318–Wellness of the Young Child or CDEC 1318–Wellness of the Young Child	3
CDEC 2407–Math and Science for Early Childhood	4
CDEC 1458–Creative Arts for Early Childhood	4
CDEC 2326–Administration of Programs for Children I or CDEC 2328–Administration of Programs for Children II.....	3
	14
Third Term	Credit
TECA 1303–Family, School and Community or CDEC 1303–Family, School and Community	3
CDEC 1323–Observation and Assessment	3
CDEC 1359–Children with Special Needs or Approved Electives	3
CDEC 2366–Practicum (or Field Experience)-Child Care Provider Assistant.....	3
	12
Certificate of Technology Total	42
Capstone Experience: CDEC 2366	
Approved Electives	
CDEC 1321 CDEC 1417 CDEC 2336	
CDEC 2341 CDEC 2422 CDEC 2424	
FMLD 1353 FMLD 1372	

Child Development/Early Childhood Education – Teacher Aide (4CHID-TA)

Certificate of Technology

Central and North Campuses

First Term	Credit
TECA–1354 Child Growth and Development or CDEC 135–Child Growth and Development.....	3
CDEC 1319–Child Guidance.....	3
TECA 1311–Educating Young Children or CDEC 1311–Educating Young Children.....	3
CDEC 1359–Children with Special Needs.....	3
CDEC 2341–The School Age Child	3
	15
Second Term	Credit
SPCH 1315–Public Speaking or SPCH 1318–Interpersonal Communication	3
TECA 1318–Wellness of the Young Child or CDEC 1318–Wellness of the Young Child	3
TECA 1303–Family, School and Community or CDEC 1303–Family, School and Community	3
CDEC 1323–Observation and Assessment	3
EDUC 1301–Introduction to the Teaching Profession	3
	15
Certificate of Technology Total	30
Capstone Experience: CDEC 1323	
Child Development/Early Childhood Education – Child Care Administrator’s Credential (6CHID-ADM)	

Occupational Certificates

Central and North Campuses

The child care administrator’s credential program has been designed to provide educational training for persons interested in teaching young children and/or directing child care centers. Upon successful completion of the 19-20 semester credit hours, the student will be awarded a credential approved by the Texas Department of Protective and Regulatory Services. To renew the Child Care Administrator’s Credential, a student must complete an additional child development course three years after course completion.

First Term	Credit
TECA 1354–Child Growth and Development or CDEC 1354–Child Growth and Development.....	3
CDEC 1319–Child Guidance.....	3
CDEC 1458–Creative Arts for Early Childhood or Approved Elective.....	4

Technical Programs

Child Development/ Early Childhood Education – Marketable Skills Achievement Awards

Curriculum Specialist Marketable Skills Achievement Award (MCHID-CUR)

Central and North Campuses

For students who have completed the administrator’s credential program, San Jacinto College provides an opportunity for additional professional development in the Curriculum Specialist Marketable Skills Achievement Award, which may be obtained after completion of the administrator’s credential program. Each award requires completion of four courses. Application for this award should be made in the Office of Enrollment Services.

First Term	Credit
CDEC 2341–The School Age Child	3
CDEC 1356–Emergent Literacy for Early Childhood	3
TECA 1311–Educating Young Children or CDEC 1311–Educating Young Children.....	3
CDEC 1413–Curriculum Resources for Early Childhood Programs.....	4
	13
Marketable Skills Achievement Award Total	13

Parent/Child Specialist Marketable Skills Achievement Award (MCHID-PC)

Central and North Campuses

For students who have completed the administrator’s credential program, San Jacinto College provides an opportunity for additional professional development in the Parent/Child Specialist Marketable Skills Achievement Award, which may be obtained after completion of the administrator’s credential program. Each award requires completion of four courses. Application for this award should be made in the Office of Enrollment Services.

First Term	Credit
FMLD 1353–Marriage and Family Issues.....	3
CDEC 1321–Infant and Toddler	3
TECA 1303–Family, School, and Community or CDEC 1303–Family, School and Community	3
CDEC 1359–Children with Special Needs.....	3
	12
Marketable Skills Achievement Award Total	12

Second Term	Credit
CDEC 2326–Administrative Programs for Children I	3
CDEC 2328–Administrative Programs for Children II	3
CDEC 1359–Children with Special Needs or Approved Electives	3
	9
Occupational Certificate Total	19

Capstone Experience: CDEC 2328

Approved Electives

CDEC 1321	CDEC 1417	CDEC 2336
CDEC 2341	CDEC 2422	CDEC 2424
FMLD 1353	FMLD 1372	

Child Development/Early Childhood Education – Associate Training for Directors (6CHID-DIR)

Occupational Certificate

Central and North Campuses

The Child Development Associate Training for Directors Occupational Certificate has been designed to provide educational training for persons interested in teaching young children and/or directing child care centers. The certificate requires completion of 18 semester credit hours. Upon successful completion of the courses, and upon receiving the Child Development Associate National Credential (CDA) from the Council of Early Childhood Recognition in Washington, D.C., the student meets director qualifications as set forth in the Texas Department of Protective and Regulatory Services MINIMUM STANDARDS and GUIDELINES.

First Term	Credit
CDEC 1417–Child Development Associate Training I	4
CDEC 2422–Child Development Associate Training II.....	4
CDEC 2424–Child Development Associate Training III.....	4
CDEC 2326–Administrative Programs for Children I	3
CDEC 2328–Administrative Programs for Children II	3
	18

Occupational Certificate Total 18

Capstone Experience: CDEC 2328

Technical Programs

Child Development Associate Training Marketable Skills Achievement Award (MCHID)

Central and North Campuses

This award is designed to prepare child care personnel for the Child Development Associate National Credential (CDA). The curriculum follows six competency areas established by the Council for Early Childhood Recognition. After completing three courses, an award is available by making application to the Office of Enrollment Services.

First Term	Credit
DEC 1417—Child Development Associate Training I.....	4
CDEC 2422—Child Development Associate Training II.....	4
CDEC 2424—Child Development Associate Training III.....	4
	12
Professional Credential Total	12
Capstone Experience: CDEC 2424	

Commercial Art

See Arts and Visual Communication

Computer-aided Drafting

See Engineering Design Graphics

Computer Information Systems

All Campuses

The Computer Information Technology program is designed primarily for students seeking an occupational certificate, certificate of technology or associate of applied science (A.A.S.) degree. It is recommended that students complete the appropriate 18-19 credit hour core computer information technology (IT) occupational certificate before continuing into a certificate of technology or associate of applied science degree. The classes in the core IT occupational certificate will apply towards most of the other IT certificates and A.A.S. degrees.

The computer information technology (IT) curriculum prepares graduates for employment with organizations that use computers to process, manage, and communicate information. The College offers certificates and/or associate of applied science degrees in the following areas: applications programming, Web applications development, desktop support and Microsoft network administration, network administration Cisco, information technology security, and database design. Several degree specialties are available to the student based on his/her primary area of interest. In the

applications programming specialty, emphasis is placed on the use of computer languages in the solution of business and scientific problems. The Web application development specialty addresses the design and development of Web pages for use on the World Wide Web. In desktop support and Microsoft network administration, a student can choose between a track with emphasis on desktop computer hardware and software support, or one with focus on the installation and maintenance of networks. In the network administration Cisco specialty, emphasis is on the design, implementation and administration of local and wide area router networks. There is also a database design certificate which emphasizes sound database design and implementation methods so that an organization's critical data resources can be effectively utilized. This program focuses on learning basic skills which will assist them in the support and development of large database systems.

Two of the newer programs, CIT simulation and game programming and the CIT industry certification programs require students to apply for admission by contacting the department chair.

The CIT simulation and game programming certificate of technology is designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing or multimedia programming.

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study: Web page design and E-commerce, beginning and advanced network administration - Microsoft, beginning and advanced network administration - Cisco, advanced information technology security, database administration, and computer hardware support. These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certification certificate consists of only the courses required to obtain a specific certification.

Note for transfer students: Due to variations in requirements at four-year colleges and universities, a student desiring a bachelor's degree in computer science is strongly advised to consult a CIT department chair at San Jacinto College and at the institution to which they wish to transfer. This communication regarding transfer degree plans with both computer department heads will help to ensure the transition process is as smooth as possible. The field of study computer science located elsewhere in the Catalog may also be appropriate.

Programming Core (6IT-PROG) Computer Information Technology Specialty

Occupational Certificate

All Campuses

It is recommended that students complete the following programming core occupational certificate before continuing into a programming certificate of technology or programming associate of applied science degree.

Technical Programs

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems	3
ITSC 1309–Integrated Software Applications I.....	3
ITSC 1325–Personal Computer Hardware	3
	9

Second Term	Credit
ITCC 1401–Cisco Exploration 1-Network Fundamentals or ITNW 1325–Fundamentals of Networking Technologies.....	3-4
ITSE 1329–Programming Logic and Design or 1331–Introduction to Visual Basic Programming.....	3
ITSW 1307–Introduction to Database.....	3
	9-10

Occupational Certificate Total **18-19**
Capstone Experience: ITSW 1307

Applications Programming (4IT-APPL)

Certificate of Technology

All Campuses

The Applications Programming Certificate of Technology is designed for students who desire to earn a credential after one year of study. All courses required for this certificate apply toward the Applications Programming Associate of Applied Science. The following curriculum provides the student with basic application programming development skills. A common job title for this certificate is entry level programmer.

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems	3
ITSC 1309–Integrated Software Applications I.....	3
ITSE 1329–Programming Logic and Design	3
ITSE 1331–Intro Visual BASIC Programming.....	3
	12

Second Term	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1307–UNIX Operating System I.....	3
ITSE 1307–Introduction to C++ Programming	3
ITSE 2349–Advanced Visual BASIC Programming.....	3
ITSW 1307–Introduction to Database.....	3
	15-16

Third Term	Credit
ITSC 2335–Application Software Problem Solving.....	3
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4
ITSE 1345–Introduction to Oracle SQL	3
ITSE 2331–Advanced C++ Programming.....	3
	12-13

Certificate of Technology Total

12-13

Capstone Experience: ITSC 2335

39-41

Approved Electives

IMED 1341	ITCC 1404	ITMT 2303
ITNW 1308	ITNW 1392	ITNW 2354
ITSC 1319	ITSC 1325	ITSC 1391
ITSC 2321	ITSC 2337	ITSE 1391
ITSE 2305	ITSE 2317	ITSW 2334
ITSY 1342		

Applications Programming Specialty (3IT-APPL)

Associate of Applied Science Degree

All Campuses

Most employers require an associate degree for entry-level positions in this field. A common job title for this degree is entry level programmer.

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems	3
ITSC 1309–Integrated Software Applications I.....	3
ITSE 1329–Programming Logic and Design	3
ITSE 1331–Introduction to Visual BASIC Programming	3
ENGL 1301–Composition I	3
PHED Activity	1
	16

Second Term	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1307–UNIX Operating System I.....	3
ITSE 1307–Introduction to C++ Programming	3
ITSW 1307–Introduction to Database.....	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity	1
	16-17

Technical Programs

Third Term	Credit
ITSC 2339–Personal Computer Help Desk or Approved Elective.....	3-4
ITSE 2331–Advanced C++ Programming.....	3
ITSE 2349–Advanced Visual BASIC Programming.....	3
*Humanities or Fine Arts	3
ENGL 2311–Technical Report Writing.....	3
Speech.....	3
<hr/>	
18-19	

Fourth Term	Credit
*Behavioral or Social Science	3
ITSC 2335–Application Software Problem Solving.....	3
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4
ITSE 1345–Introduction to Oracle SQL	3
ITSE 2317–JAVA Programming	3
<hr/>	
15-16	
Associate of Applied Science Degree Total	
65-68	
Capstone Experience: ITSC 2335	

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives		
IMED 1341	ITCC 1404	ITMT 2303
ITNW 1308	ITNW 1392	ITNW 2354
ITSC 1319	ITSC 1325	ITSC 1391
ITSC 2321	TSC 2337	ITSE 1391
ITSE 2305	ITSE 2317	ITSW 2334
ITSY 1342		

Web, Desktop, Cisco, and Security Core (6IT-WDCS-C)

Occupational Certificate

All Campuses

It is recommended that students complete the following core occupational certificate before continuing into either a certificate of technology or associate of applied science degree program in the areas of Web, desktop support, Cisco or security.

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSC 1325–Personal Computer Hardware	3
<hr/>	
9	

Second Term	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSE 1329–Programming Logic and Design or ITSE 1331–Introduction to Visual BASIC Programming	3
ITSW 1307–Introduction to Database.....	3
<hr/>	
9	
Occupational Certificate Total	
18-19	
Capstone Experience: ITSW 1307	

Web Development

All Campuses

Web development is divided into two major areas: Web page programming and Web page design. Web page programming focuses on connecting Web pages to data sources and back-end data servers. Web page design focuses on the aesthetic layout and artistic style of the website. The Web Applications Development Certificate of Technology and the Web Applications Development Associate of Applied Science focus on programming; whereas, the Web page Design and Implementation Certificate of Technology focuses on layout and style.

Web Applications Development Specialty (4IT-WBDV)

Certificate of Technology

All Campuses

The Web Applications Development Certificate of Technology is designed for students who desire to earn a credential after one year of study. All courses required for this certificate apply toward the Web Applications Development Associate of Applied Science. The following curriculum is designed to provide the student with basic Web applications development skills. Emphasis is placed upon designing Web applications to communicate with data sources and business systems. Common job titles for this certificate include webmaster, web specialist, web application developer, and web designer.

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSC 1319–Internet/Web Page Development.....	3
ITSE 1329–Programming Logic and Design	3
ITSE 1331–Introduction to Visual BASIC Programming	3
<hr/>	
15	

Technical Programs

Second Term	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC–1401 Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSE 1307–Introduction to C++ Programming	3
ITSE 2313–Web Authoring	3
ITSW 1307–Introduction to Database.....	3

12-13

Third Term	Credit
IMED 1341–Interface Design	3
IMED 1345–Interactive Digital Media I	3
INEW 2334–Advanced Web Programming.....	3
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4

12-13

Certificate of Technology Total **39-41**

Capstone Experience: INEW 2334

Approved Electives

ITCC 1404	ITNW 1308	ITNW 1392
ITNW 2305	ITNW 2354	ITSC 1325
ITSC 1391	ITSC 2321	ITSE 1345
ITSE 1391	ITSE 2305	ITSE 2317
ITSE 2331	ITSW 2334	ITSY 1342
ITSY 2300		

Web Applications Development Specialty (3IT-WBDV)

Associate of Applied Science Degree

All Campuses

The following degree is designed to provide the student with basic Web applications development skills. Common job titles for this degree include webmaster, web specialist, web application developer, and web designer.

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSC 1319–Internet/Web Page Development.....	3
ITSE 1329–Programming Logic and Design	3
ENGL 1301–Composition I	3
PHED Activity	1

16

Second Term	Credit
IMED 1341–Interface Design	3
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSE 1331–Introduction to Visual BASIC Programming	3
ITSW 1307–Introduction to Database	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity	1

16-17

Third Term	Credit
IMED 1345–Interactive Digital Media I	3
ITNW 2354–Internet/Intranet Server.....	3
ITSE 1307–Introduction to C++ Programming	3
ITSE 2313–Web Authoring	3
*Behavioral or Social Science	3
ENGL 2311–Technical Report Writing.....	3

18

Fourth Term	Credit
INEW 2334–Advanced Web Programming.....	3
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4
ITSE 1345–Introduction to Oracle SQL	3
ITSE 2317–JAVA Programming	3
*Humanities or Fine Arts	3
Speech	3

18-19

Associate of Applied Science Degree Total **68-70**

Capstone Experience: INEW 2334

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.*

Approved Electives

ITCC 1404	ITNW 1308	ITNW 1392
ITNW 2305	ITSC 1325	ITSC 2321
ITSE 1391	ITSE 2305	ITSE 2331
ITSE 2349	ITSW 2334	ITSY 1342

Web Page Design and Implementation Specialty (4IT-WBDI)

Certificate of Technology

All Campuses

The following trans-departmental curriculum between computer information technology and art is designed to provide the student with basic Web applications development skills. Emphasis is placed on artistic and graphic design with basic programming skills. Common job titles for this certificate include webmaster, web specialist, web applications developer, and web designer.

Technical Programs

First Term	Credit
ITSE 1329—Programming Logic and Design	3
IMED 1341—Interface Design or ARTC 2305—Digital Imaging II	3
IMED 1301—Introduction to Multimedia	3
ARTC 1325—Introduction to Computer Graphics	3
	12

Second Term	Credit
ITSC 1319—Internet/Web Page Development	3
ITSE 1331—Introduction to Visual BASIC Programming	3
ARTC 1317—Design Communication I	3
ARTV 1303—Basic Animation or ARTV 1351—Digital Video	3
	12

Third Term	Credit
ITSE 2313—Web Authoring	3
IMED 1345—Interactive Digital Media I	3
INEW 2334—Advanced Web Programming	3
IMED 2315—Web Page Design II	3
	12

Certificate of Technology Total **36**

Capstone Experience: INEW 3224

Approved Electives

IMED 1341	IMED 1345	INEW 2334
ITMT 1350	ITNW 1392	ITNW 2305
ITSC 1307	ITSC 1319	ITSC 1321
ITSC 1391	ITSC 2321	ITSE 1307
ITSE 1345	ITSE 1391	ITSE 2349
ITSW 2334	ITSY 1342	ITSY 2300

Desktop Support and Microsoft Network Administration

All Campuses

The desktop support curriculum is designed to provide students with skills in desktop computer hardware and software support, and prepare for exams leading to industry certifications such as A+, Net+, and Microsoft Office Specialist (MOS). Students will learn to install, maintain, repair, replace, and upgrade desktop computers. Common job titles for this certificate include: desktop support specialist, helpdesk support, and PC technician.

The Microsoft network administration curriculum is designed to provide students with basic skills needed to work as Microsoft computer network service technicians. Emphasis is placed upon the installation and maintenance of networks. A graduate will be able to administer and troubleshoot data and communication networks. These courses can lead to the Microsoft Certified Professional (MCP), and/or Microsoft Certified Systems Engineer (MCSE), Net+, and Server+ certifi-

cations. Common job titles for this certificate include network technician, network administrator, server administrator, and network operations specialist.

Desktop Support and Microsoft Network Administration Specialty (4IT-DSMN)

Certificate of Technology

All Campuses

First Term	Credit
ITNW 1325—Fundamentals of Networking Technologies or ITCC—1401 Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1305—Introduction to PC Operating Systems	3
ITSC 1309—Integrated Software Applications I.....	3
ITSE 1329—Programming Logic and Design	3
	12-13

Second Term	Credit
ITNW 1308—Implementing and Supporting Client Operating Systems	3
ITSC 1325—Personal Computer Hardware	3
ITSE 1331—Introduction to Visual BASIC Programming	3
ITSW 1307—Introduction to Database	3
	12

Third Term	Credit
ITMT 1340—Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW 1354—Implement and Supporting Servers.....	3
ITNW 2354—Internet/Intranet Server.....	3
ITSC 2339—Personal Computer Help Desk.....	3
ITSC 2364—Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4
	12-13

Certificate of Technology Total **36-38**

Capstone Experience: ITNW 2354

Approved Electives

IMED 1341	IMED 1345	INEW 2334
ITMT 1350	ITNW 1392	ITNW 2305
ITSC 1307	ITSC 1319	ITSC 1321
ITSC 1391	ITSC 2321	ITSE 1307
ITSE 1345	ITSE 1391	ITSE 2349
ITSW 2334	ITSY 1342	ITSY 2300

Technical Programs

Desktop Support and Microsoft Network Administration Specialty (3IT-DSMN)

Associate of Applied Science Degree

All Campuses

First Term	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSE 1329–Programming Logic and Design.....	3
ENGL 1301–Composition I.....	3
PHED Activity.....	1
	16-17

Second Term	Credit
ITNW 1308–Implementing and Supporting Client Operating Systems.....	3
ITSC 1325–Personal Computer Hardware.....	3
ITSE 1331–Introduction to Visual BASIC Programming.....	3
ITSW 1307–Introduction to Database.....	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra.....	3
PHED Activity.....	1
	16

Third Term	Credit
ITMT 1340–Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW 1354–Implement and Supporting Servers.....	3
ITSC 1307–UNIX Operating Systems I or Approved Elective.....	3-4
ITSC 1321–Intermediate PC Operating Systems.....	3
ITSC 2339–Personal Computer Help Desk.....	3
Speech.....	3
ENGL 2311–Technical Report Writing.....	3
	18-19

Fourth Term Credit

ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4
ITMT 1350–Implementing, Managing and Maintaining a Microsoft Windows Server 2003 Network Infrastructure: Network Services or INTW 1353–Supporting Network Server Infrastructure.....	3
ITNW 2354–Internet/Intranet Server.....	3
*Behavioral or Social Science.....	3
*Humanities or Fine Arts.....	3
	15-16

Associate of Applied Science Degree Total

65-67

Capstone Experience: ITNW 2354

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives

ITMT 1350	IMED 1345	INEW 2334
ITCC 1404	ITMT 2300	ITMT 2303
ITNW 1345	ITNW 1392	ITNW 2305
ITNW 2352	ITSC 1319	ITSC 1391
ITSC 2321	ITSE 1307	ITSE 1345
ITSE 1391	ITSE 2349	ITSW 2334
ITSY 1342		

Network Administration - CISCO

All Campuses

The following curriculum is designed to provide the student with the skills needed to work as a Cisco network technician. Emphasis is placed upon the installation and maintenance of networks in business and industry. The graduate will be able to administer and troubleshoot Cisco networking equipment and networking infrastructure. The Cisco courses can lead to the certifications of Certified Cisco Network Associate (CCNA), Certified Cisco Network Professional (CCNP), and Comptia Net+. Common job titles for graduates of the certificate and/or degree include network technician, Cisco service representative, technical support specialist, and network system administration.

Technical Programs

Network Administration CISCO Specialty (4IT-NW-C)

Certificate of Technology

All Campuses

First Term	Credit
ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	4
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSC 1325–Personal Computer Hardware	3
	13

Second Term	Credit
ITCC 1404–Cisco Exploration 2 - Routing Protocols and Concepts..	4
ITNW 1308–Implementing and Supporting Client Operating Systems	3
ITSC 1307–UNIX Operating Systems I or Approved Elective	3-4
ITSW 1307–Introduction to Database	3
	13-14

Third Term	Credit
ITCC 2408–Cisco Exploration 3 - LAN Switching and Wireless.....	4
ITCC 2410–Cisco Exploration 4 - Accessing the WAN.....	4
ITMT 1340–Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW–1354 Implement and Supporting Servers.....	3
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3-4
	14-15

Certificate of Technology Total

40-42

Capstone Experience: ITCC 2410

Approved Electives

ITCC 2432	ITCC 2436	ITCC 2440
ITCC 2444	ITMT 1350	ITMT 2300
ITNW 1345	ITNW 1353	ITNW 1392
ITNW 2305	ITSC 1319	ITSC 1321
ITSC 1391	ITSE 1329	ITSE 1331
ITSY 1342	ITSY 2300	

Network Administration CISCO Specialty (3IT-NW-C)

Associate of Applied Science Degree

All Campuses

First Term	Credit
ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	4
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSE 1329–Programming Logic and Design	3
ENGL 1301–Composition I	3
PHED Activity	1
	17

Second Term	Credit
ITCC 1404–Cisco Exploration 2 - Routing Protocols and Concepts..	4
ITSW 1307–Introduction to Database	3
ITSE 1331–Introduction to Visual BASIC Programming	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
Speech	3
PHED Activity	1
	17

Third Term	Credit
ITCC 2408–Cisco Exploration 3 - LAN Switching and Wireless.....	4
ITNW 1308–Implementing and Supporting Client Operating Systems	3
ITSC 1325–Personal Computer Hardware	3
Behavioral or Social Science	3
ENGL 2311–Technical Report Writing.....	3
	16

Technical Programs

Technical Programs

Information Technology Security Specialty (4IT-ITS)

Certificate of Technology

All Campuses

First Term Credit

ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSY 1342–Information Technology Security	3
	12-13

Second Term Credit

ITNW 1308–Implementing and Supporting Client Operating Systems	3
ITSC 1307–UNIX Operating System I.....	3
ITSE 1329–Programming Logic and Design	3
ITSY 2300–Operating System Security.....	3
	12

Third Term Credit

ITMT 1340–Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW 1354–Implementing and Supporting Servers.....	3
ITSY 2301–Firewalls and Network Security	3
ITSY 2341–Security Management Practices.....	3
Approved Elective	3-4
	12-13

Occupational Certificate Total 36-38

Capstone Experience: ITSY 2341

Approved Electives		
ITCC 2432	ITCC 2436	ITCC 2440
ITMT 1350	ITMT 2300	ITMT 2350
ITNW 1345	ITNW 1353	ITNW 1392
ITNW 2305	ITSC 1321	ITSC 1391
ITSC 2321	ITSC 2337	ITSE 1307
ITSC 1319	ITSE 1331	ITSE 1345
ITSE 1391	ITSW 2334	

Fourth Term Credit

ITCC 2410–Cisco Exploration 4 - Accessing the WAN.....	4
ITMT 1340–Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW 1354–Implement and Supporting Servers or ITSC 1307–UNIX Operating System I or Approved Elective.....	3-4
ITNW 2354–Internet/Intranet Server or ITMT 1350–Implementing, Managing, and Maintaining a Microsoft Windows Server 2003 Network Infrastructure: Network Services or ITNW 1353–Supporting Network Server Infrastructure.....	3-4
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3
*Humanities or Fine Arts	3

16-18

Associate of Applied Science Degree Total 66-68

Capstone Experience: ITCC 2410

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives

ITCC 2432	ITCC 2436	ITCC 2440
ITCC 2444	ITMT 1350	ITMT 2300
ITMT 2350	ITNW 1345	ITNW 1353
ITNW 1392	ITNW 2305	ITSC 1319
ITSC 1321	ITSC 1391	ITSC 2321
ITSC 2337	ITSE 1307	ITSE 1331
ITSE 1345	ITSE 1391	ITSW 2334
ITSY 1342		

Information Technology Security

All Campuses

With this certificate or associate of applied science degree, graduates can work in the network security field to help keep hackers, viruses, and terrorists from intruding and damaging computers. Common job titles include: information technology security officer, network operations specialist, VPN engineer, and chief security officer.

Technical Programs

Information Technology Security Specialty (3IT-ITS)

Associate of Applied Science

All Campuses

First Term	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSY 1342–Information Technology Security	3
ENGL 1301–Composition I	3
PHED Activity	1
16-17	
Second Term	Credit
ITNW 1308–Implementing and Supporting Client Operating Systems	3
ITSC 1307–UNIX Operating System I.....	3
ITSE 1329–Programming Logic and Design	3
ITSW 1307–Introduction to Database.....	3
ITSY 2300–Operating System Security.....	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity	1
19	
Third Term	Credit
ITMT 1340–Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW 1354–Implementing and Supporting Services	3
ITSY 2301–Firewalls and Network Security	3
ITSY 2341–Security Management Practices.....	3
*Humanities or Fine Arts	3
Speech	3
15	
Fourth Term	Credit
ITSY 2342–Incident Response and Handling	3
ITSY 2343–Computer System Forensics.....	3
ITSY 2359–Security Assessment and Auditing.....	3
ENGL 2311–Technical Report Writing.....	3
*Behavioral or Social Science	3
15	
Associate of Applied Science Total:	65-66
Capstone Experience: ITSY 2359	

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Database Design

All Campuses

With this certificate of technology, graduates can work in the expanding and exciting database field to analyze, design, implement, or maintain large industrial database systems. Common job titles include information database administrator, database developer, database designer, and database programmer.

Database Design (4IT-DBD)

Certificate of Technology

All Campuses

First Term	Credit
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSE 1329–Programming Logic and Design or ITSE 1331–Introduction to Visual BASIC Programming	3
ITSW 1307–Introduction to Database.....	3
15-16	
Second Term	Credit
ITSC 1319–Internet/Web Page Development.....	3
ITMT 1340–Managing and Maintaining Microsoft Windows Server 2003 Environment or ITNW 1354–Implementing and Supporting Servers.....	3
ITSE 1345–Introduction to Oracle SQL or ITSW 2337–Advanced Database.....	3
ITSY 1342–Information Technology Security	3
ITNW 2354–Internet/Intranet Server.....	3
15	
Third Term	Credit
INEW 2334–Advanced Web Programming.....	3
ITMT 2303–Administering a Microsoft SQL Server Database or ITNW 2352–Administering SQL Server.....	3
ITMC 2337–Programming a Microsoft SQL Server Database or ITSE 2354–Advanced Oracle PL/SQL or ITSE 2309–Database Programming	3
ITSC 2364–Practicum (or Field Experience) - Computer and Information Sciences, General or Approved Elective.....	3
12	
Certificate of Technology Total	42-43
Capstone Experience: ITMC 2337 or ITSE 2354 or ITSE 2309	
Approved Electives	
ITNW 2305	ITSC 1307
	ITSC 2339

Simulation and Game Programming Certificate Program

All Campuses

Students must apply for admission to this program by contacting the department chair and verifying that they have the appropriate interest and drive to succeed in this program's certificates.

The CIT simulation and game programming certificate programs are designed for students who are interested in advanced programming areas, as in simulations, game programming, program testing and/or multimedia programming.

Introductory Game Design and Development (6IT-GAME)

Occupational Certificate

All Campuses

First Term	Credit
COSC 1336–Programming Fundamentals I or ITSE 1329–Programming Logic and Design	3
ITSE 1331–Introduction to Visual BASIC Programming	3
GAME 1303–Introduction to Game Design and Development.....	3
	9

Second Term	Credit
COSC 1337–Programming Fundamentals II or ITSE 1307–Introduction to C++ Programming	3
ITSC 1305–Introduction to PC Operating Systems	3
INEW 2340–Object Oriented Design - Game Design	3
	9

Occupational Certificate Total: **18**
Capstone Experience: INEW 2340

Simulation and Game Design (4IT-GAMS)

Certificate of Technology

All Campuses

First Term	Credit
COSC 1336–Programming Fundamentals I or ITSE 1329–Programming Logic and Design	3
COSC 1337–Programming Fundamentals II or ITSE 1307–Introduction to C++ Programming	3
ITSE 1331–Introduction to Visual BASIC Programming	3
GAME 1303–Introduction to Game Design and Development.....	3
ITSC 1305–Introduction to PC Operating Systems	3
	15

Technical Programs

Second Term	Credit
COSC 2336–Programming Fundamentals II or ITSE 2331–Advanced C++ Programming	3
GAME 1343–Game and Simulation Programming I.....	3
GAME 2332–Project Development I.....	3
INEW 2340–Object Oriented Design - Game Design	3
ITSE 2345–Data Structures.....	3
	15

Third Term	Credit
GAME 1304–Level Design or GAME 1353–Multi-User Game Programming I	3
GAME 2344–DirectX Programming	3
GAME 2341–Game Scripting or Approved Elective.....	3-4
GAME 2359–Game and Simulation Group Project	3
	12-13

Certificate of Technology Total: **42-43**

Capstone Experience: GAME 2359

Approved Electives		
GAME 1304	GAME 1353	ITCC 1401
ITNW 1325	ITSC 2335	ITSE 1391
ITSE 2317	ITSE 2349	ITSY 1342

Computer Information Technology Industry Certification Program

All Campuses

The CIT industry certification program is intended for students with industry experience in one or more of the following areas of study: Web page design and E-commerce, beginning and advanced network administration - Microsoft, beginning and advanced network administration – Cisco, advanced information technology security, database administration, and computer hardware support. These certificates enable students to supplement their current job skills and obtain industry certifications, if desired. Each industry certification certificate consists of only the courses required to obtain a specific certification.

Web Designer E-commerce/Web Page Design (6IT-ECOM)

Occupational Certificate

All Campuses

First	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1319–Internet/Web Page Development	3
IMED 1341–Interface Design	3
	9-10

Technical Programs

Second	Credit
IMED 1345–Interactive Digital Media II.....	3
INEW 2334–Advanced Web Programming.....	3
ITSE 2313–Web Authoring	3

9

Occupational Certificate Total **18-19**
Capstone Experience: INEW 2334

Beginning Network Administration Microsoft Specialty (6IT-BMS)

Occupational Certificate

All Campuses

First	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3-4
ITNW 1308–Implementing and Supporting Client Operating Systems	3
ITSC 1305–Introduction to PC Operating Systems.....	3

9-10

Second **Credit**

ITMT 1340–Managing and Maintaining a Microsoft Windows Server 2003 Environment or ITNW 1354–Implementing and Supporting Server.....	3
ITMT 1350–Implementing, Managing and Maintaining a Microsoft Windows Server 2003 Network Infrastructure: Network Services or INTW 1353–Supporting Network Server Infrastructure.....	3
ITSC 1325–Personal Computer Hardware	3

9

Occupational Certificate Total **18-19**

Capstone Experience: ITMT1350 or ITNW 1353

Advanced Network Administration Microsoft Specialty (6IT-AMS)

Occupational Certificate

All Campuses

First	Credit
ITMT 2300–Planning, Implementing, and Maintaining a Microsoft Windows Server 2003 Active Directory Infrastructure or ITNW 1345–Implementing Network Directory Services.....	3
ITNW 2354–Internet/Intranet Server.....	3
ITSW 1307–Introduction to Database or ITSE 1345–Introduction to Oracle SQL.....	3

9

Second Term **Credit**

ITMT 2303–Administering a Microsoft SQL Server Database or ITNW 2352–Administering SQL Server.....	3
ITSC 2364–Practicum (of Field Exp.) - Computer and Information Sciences, General or Approved Elective.....	3
ITMT 2330–Designing a Microsoft Windows Server 2003 Active Directory and Network Infrastructure or ITNW 2356–Designing a Network Directory Infrastructure	3

9

Occupational Certificate Total **18**

Capstone Experience: ITMT 2330 or ITNW 2356

Approved Electives

IMED 1341	IMED 1345	INEW 2334
ITMT 2350	ITNW 1392	ITNW 2305
ITSC 1325	ITSC 1391	ITSC 1319
ITSE 1331	ITSE 1329	ITSY 1342
ITSY 2300		

Beginning Network Administration CISCO Specialty (6IT-BC)

Occupational Certificate

All Campuses

First	Credit
ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	4
ITCC 1404–Cisco Exploration 2 - Routing Protocols and Concepts..	4

8

Second **Credit**

ITCC 2408–Cisco Exploration 3 - LAN Switching and Wireless.....	4
ITCC 2410–Cisco Exploration 4 - Accessing the WAN.....	4

8

Occupational Certificate Total **16**

Capstone Experience: ITCC 2410

Advanced Network Administration CISCO Specialty (6IT-AC)

Specialty Occupational Certificate

All Campuses

First	Credit
ITCC 2432–CCNP 1: Advanced Routing	4
ITCC 2436–CCNP 2: Remote Access	4

8

Second **Credit**

ITCC 2440–CCNP 3: Multilayer Switching.....	4
ITCC 2444–CCNP 4: InterNW Troubleshoot	4

8

Occupational Certificate Total **16**

Capstone Experience: ITCC 2444

Advanced Information Technology Security (6IT-AITS)

Occupational Certificate

All Campuses

First	Credit
ITSY 2300–Operating System Security.....	3
ITSY 2301–Firewalls and Network Security.....	3
ITSY 2341–Security Management Practices.....	3
	9
Second	Credit
ITSY 2342–Incident Response and Handling.....	3
ITSY 2343–Computer System Forensics.....	3
ITSY 2359–Security Assessment and Auditing.....	3
	9
Occupational Certificate Total	18
Capstone Experience: ITSY 2359	

Advanced Database Administrator (6IT-ADA)

Occupational Certificate

All Campuses

First	Credit
ITNW 2354–Internet/Intranet Server.....	3
ITMT 2303–Administering a Microsoft SQL Server Database or ITNW 2352–Administering SQL Server.....	3
ITSE 1345–Introduction to Oracle SQL.....	3
	9
Second	Credit
INEW 2334–Advanced Web Programming.....	3
ITMC 2337–Programming a Microsoft SQL Server Database or ITSE 2354–Advanced Oracle PL/SQL or ITSE 2309–Database Programming.....	3
ITSY 1342–Information Technology Security.....	3
	9
Occupational Certificate Total	18
Capstone Experience: ITMC 2337 or ITSE 2354 or ITSE 2309	

Technical Programs

Computer Hardware Support (6IT-CHS)

Occupational Certificate

All Campuses

First	Credit
ITSC 1305–Introduction to PC Operating Systems.....	3
ITSC 1309–Integrated Software Applications I.....	3
ITSC 1325–Personal Computer Hardware.....	3
	9
Second	Credit
ITNW 1325–Fundamentals of Networking Technologies or ITCC–1401 Cisco Exploration 1 - Network Fundamentals.....	3-4
ITSC 1321–Intermediate PC Operating Systems.....	3
	6-7
Occupational Certificate Total	15-16
Capstone Experience: ITSC 1321	

Cosmetology

Cosmetology Operator (3COSM-OP)

Associate of Applied Science Degree

All Campuses

The cosmetology operator curriculum is designed to provide the student with basic knowledge and skills required to pass the Texas Department of Licensing and Regulations Examination for licensing and for entry-level employment in professional salons. Emphasis is placed on using those skills and that knowledge in a simulated salon. All key aspects of the cosmetology profession are addressed.

First	Credit
CSME 1354–Artistry of Hair Design I.....	3
CSME 1310–Introduction to Haircutting Related Theory.....	3
CSME 1501–Orientation to Cosmetology.....	5
CSME 1553–Chemical Reformation and Related Theory.....	5
	16
Second	Credit
CSME 2343–Salon Development.....	3
CSME 2244–Preparation for the State Licensing Written Exam.....	2
CSME 1355–Artistry of Hair Design II.....	3
CSME 2310–Intermediate Haircutting and Related Theory.....	3
CSME 2501–Principles of Hair Coloring and Related Theory.....	5
	16

Technical Programs

Third	Credit
CSME 2539–Advanced Hair Design.....	5
CSME 2541–Preparation for the State Licensing Written Exam.....	5
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
ENGL 1301–Composition I	3
PHED Activity	1

17

Fourth	Credit
MATH 1333–Contemporary Mathematics for Technical Programs...	3
Speech	3
*Humanities or Fine Arts	3
*Behavioral or Social Science	3

12

Associate of Applied Science Degree Total 62

Capstone Experience: Texas Department of Licensing and Regulations Operator Licensure Examination

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Cosmetology Operator (4COSM-OP)

Certificate of Technology

All Campuses

The Cosmetology Operator Certificate of Technology is a course of study designed to meet the needs of those students who desire to enter the beauty industry in a minimum of time. The program will provide the student with the technical background and experience necessary to develop the skills and theoretical knowledge required to pass the Texas Department of Licensing and Regulations Examination for licensing and to gain entry-level employment in professional salons. Full-time students can earn the certificate of technology in one year. All key aspects of the cosmetology profession are addressed.

First Term	Credit	Clock Hours
CSME 1310–Introduction to Haircutting and Related Theory	3	112
CSME 1501–Orientation to Cosmetology.....	5	176
CSME 1553–Chemical Reformation and Related Theory	5	176
CSME 1354–Artistry of Hair Design I.....	3	112

16 576

Second Term	Credit	Clock Hours
CSME 2343–Salon Development.....	3	96
CSME 2244–Preparation for the State Licensing Written Examination	2	80
CSME 1355–Artistry of Hair Design II or CSME 2337–Advanced Cosmetology Techniques.....	3	112
CSME 2310–Intermediate Haircutting and Related Theory	3	112
CSME 2501–Principles of Hair Coloring and Related Theory	5	176

16 576

Third Term	Credit	Clock Hours
CSME 2539–Advanced Hair Design.....	5	176
CSME 2541–Preparation for the State Licensing Examination	5	176

10 352

Certificate of Technology Totals 42 1504
Capstone Experience: Texas Department of Licensing and Regulations Operator Licensure Exam

Cosmetology High School Operator Dual Credit (4COSM-OPHS)

Certificate of Technology

All Campuses

The Cosmetology High School Operator Dual Credit Certificate of Technology is a course of study designed to meet the needs of high school students who desire to enter the beauty industry in a minimum of time. The program will provide the student with the technical background and experience necessary to develop the skills and theoretical knowledge required to pass the Texas Department of Licensing and Regulations Examination for licensing and to gain entry-level employment in professional salons. Part-time students can complete the certificate of technology in two years. All key aspects of the cosmetology profession are addressed.

First Term	Credit	Clock Hours
CSME 1310–Introduction to Haircutting and Related Theory	3	112
CSME 1505–Fundamentals of Cosmetology.....	5	112

8 224

Technical Programs

Second Term	Credit	Clock Hours
CSME 1553—Chemical Reformation and Related Theory	5	176
CSME 1354—Artistry of Hair Design I.....	3	112
	8	288

Third Term	Credit	Clock Hours
CSME 1355—Artistry of Hair Design II.....	3	112
CSME 2501—Principles of Hair Coloring and Related Theory	5	176
	8	288

Fourth Term	Credit	Clock Hours
CSME 2541—Preparation for the State Licensing Examination	5	176
CSME 2310—Intermediate Haircutting and Related Theory	3	112
	8	288

Certificate of Technology Totals **32** **1088**
Capstone Experience: Texas Department of Licensing and Regulations Operator Licensure Exam

Cosmetology Instructor (3COSM-INST)

Associate of Applied Science Degree

All Campuses

This program is designed to provide classroom management and instructional training for licensed cosmetologists, manicurists, or facialists who already possess skills in their respective fields. This program will train students for professional positions as cosmetology instructors in the private and public sectors of education.

To enroll in the cosmetology instructor courses listed below, the student must be 18 years of age, have a valid Texas Department of Licensing and Regulations License, and provide evidence of a high school diploma or GED equivalent. Two years of work experience is preferred.

First Term	Credit
CSME 1435—Orientation to the Instruction of Cosmetology.....	4
CSME 1534—Cosmetology Instructor I.....	5
ENGL 1301—Composition I.....	3
Speech.....	3
BUSG 2309—Small Business Management.....	3

18

Second Term	Credit
CSME 2414—Cosmetology Instructor II.....	4
CSME 2515—Cosmetology Instructor III.....	5
HRPO 1311—Human Relations or Free Elective.....	3
ENGL 1302—Composition II or ENGL 2311—Technical Report Writing.....	3
PHED Activity.....	1
	16

Third Term	Credit
CSME 2445—Instructional Theory and Clinic Operations.....	4
CSME 2544—Cosmetology Instructor IV.....	5
ITSC 1309—Integrated Software Applications I or BCIS 1305—Business Computer Applications.....	3
PHED Activity.....	1
	13

Fourth Term	Credit
MATH 1333—Contemporary Mathematics for Technical Programs	3
*Behavioral or Social Science.....	3
*Humanities or Fine Arts.....	3
Approved Elective.....	3
Approved Elective.....	3
	15

Associate of Applied Science Degree Total **62**
Credential Exam: Texas Department of Licensing and Regulations Instructor Licensure Examination

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.*

Approved Electives		
ARTS 1316	CSME 1330	CSME 1421
CSME 1457	CSME 1520	CSME 1531
CSME 1541	CSME 1545	CSME 1552
CSME 2430	CSME 2431	BMGT 1301

Cosmetology Instructor (4COSM-INST)

Certificate of Technology

All Campuses

The Cosmetology Instructor Certificate of Technology is designed to meet the needs of those students who desire to enter the world of education in a minimum of time. This program will provide the student with the training necessary to provide proper instruction in varied classroom situations. Emphasis will be on classroom management, curriculum development, evaluation methods, and the use of media in the classroom.

Technical Programs

Before registering for the cosmetology instructor courses listed below, the student must have a valid Texas Department of Licensing and Regulations License, and must provide evidence of a high school diploma or GED equivalent. Two years of work experience is preferred.

First Term	Credit	Clock Hours
CSME 1435–Orientation to the Instruction of Cosmetology	4	112
CSME 1534–Cosmetology Instructor I	5	144
	9	256

Second Term	Credit	Clock Hours
CSME 2414–Cosmetology Instructor II	4	112
CSME 2515–Cosmetology Instructor III	5	144
	9	256

Third Term	Credit	Clock Hours
CSME 2445–Instructional Theory and Clinic Operation	4	112
CSME 2544–Cosmetology Instructor IV	5	144
	9	256

Certificate of Technology Totals **27** **768**
Capstone Experience: Texas Department of Licensing and Regulations Instructor Licensure Examination

Massage Therapy (4MASG-THPY)

Certificate of Technology

Central Campus

The Massage Therapy Certificate of Technology is a course of study designed to meet the needs of those students desiring to enter the massage therapy profession. Our program prepares students with the technical knowledge, lab skills, and hands-on training to successfully complete a national licensing exam and gain licensure from the State of Texas as a Licensed Massage Therapist. Full-time students can earn the certificate of technology in two semesters. All key aspects of the massage therapy profession are addressed. Applicants must agree to be screened for criminal history as required by the Texas Department of State Health Services

First Term	Credit
MSSG 1109–Health and Hygiene	1
MSSG 1411–Massage Therapy Fundamentals I	4
MSSG 1413–Anatomy & Physiology for Massage	4
MSSG 1207–Business Practices & Professional Ethics	2
MSSG 1105–Hydrotherapy/Therapeutic Modalities	1
	12

Second Term	Credit
MSSG 2413–Kinesiology for Massage	4
MSSG 2311–Massage Therapy Fundamentals II	3
MSSG 2314–Pathology for Massage	3
MSSG 2101–Chair Massage	1
MSSG 2186–Internship--Massage Therapy/Therapeutic Massage... 1	1
	12

Certificate of Technology Total **24**
Credential Exam: Texas Department of of State Health Services Massage Therapy Registration State Written Examination

Facial (6COSM-FAC)

Occupational Certificate

North Campus

The Facial Occupational Certificate is designed to prepare the student with the skills and knowledge required for an entry-level position in the facial/esthetics profession. After completion of CSME 1421, CSME 1520, CSME 1545, CSME 1302, CSME 2333 and CSME 2431, the student is eligible to take the Texas Department of Licensing and Regulations Facial/Esthetics Specialty examination, provided the 750-clock-hour requirement has been met.

First Term	Credit	Clock Hours
CSME 1520–Orientation to Facial Specialist.....	5	176
CSME 1421–Principles of Facial/Esthetic Technology I	4	128
CSME 1302–Applications of Facial/Esthetics Technology I	3	80
CSME 1545–Principles of Facial/Esthetic Technology II	5	176
CSME 2431–Principles of Facial/Esthetic Technology III	4	128
CSME 2333–Applications of Facial/Esthetics Technology II	3	80

Occupational Certificate Totals **24** **768**
Capstone Experience: Texas Department of Licensing and Regulations Facial Specialist Exam

Nail Technician (6COSM-NAI)

Occupational Certificate

Central and South Campuses

The Nail Technician Occupational Certificate is designed to provide the student with the basic skills and knowledge required to pass the Texas Department of Licensing and Regulations Examination for licensing and to gain entry-level employment in a professional salon. Emphasis is on the application of all learned skills and theoretical knowledge in a simulated salon. All key aspects of the nail profession are addressed.

Technical Programs

Technical Programs

All students considering transfer should consult with a counselor regarding the specific requirements of various universities for this major.

Law Enforcement Option (3CRIJ-LE)

Associate of Applied Science Degree

The criminal justice department at San Jacinto College has voluntarily implemented the POTAAC agreement to articulate 13 hours of college credit for licensed peace officers in Texas that meet the following qualifications:

- Successfully completed an approved 560-hour law enforcement training program.
- Successfully passed the Texas Commission on Law Enforcement Officers Standards and Education (TCLEOSE) licensing exam after 1983.
- Successfully completed six (6) semester hours of criminal justice at San Jacinto College.

Interested and qualified students should contact the department chair prior to enrollment.

Central and North Campuses

The law enforcement option is for those students planning careers in criminal law, federal, state or local law enforcement, and for other students interested in learning about the operation of the criminal justice system.

First Term	Credit	Clock Hours
CSME 1330–Orientation to Nail Technology.....	3	144
CSME 1531–Principles of Nail Technology I.....	5	176
CSME 1541–Principles of Nail Technology II.....	5	176
CSME 2430–Nail Enhancement	4	112
Occupational Certificate Totals	17	608

Capstone Experience: Texas Department of Licensing and Regulations Manicurist Licensure Exam

Hair Weaving and Braiding (MCOSM-HWV)

Marketable Skills Achievement Award

North Campus

The hair weaving and braiding marketable skills achievement award program is designed to prepare the student with the skill and knowledge required for performing hair weaving and braiding services. After completion of CSME 1457 and CSME 1552 the student is eligible to take the Texas Department of Licensing and Regulations Hair Weaving and Braiding Specialty Examination, provided the 300-clock-hour requirement has been met. Students must complete all course in a certificate program and make a grade of C or better in each course. Application for this award should be made in the Office of Enrollment Services.

First Term	Credit	Clock Hours
CSME 1457–Application of Hair Weaving and Braiding	4	160
CSME 1552–Orientation to Hair Weaving and Braiding	5	160
Occupational Certificate Totals	9	320

Capstone Experience: Texas Department of Licensing and Regulations Hair Weaving/Braiding Specialist Exam

Criminal Justice

Associate of Arts Degree

University Transfer Plan

Central and North Campuses

Students who will pursue a four-year degree at a university should enroll in the associate of arts (A.A.) degree plan for a maximum of transferable credit. The A.A. is a 61-credit hour program, which may include the following courses in the major:

Criminal Justice (15 semester hours)			
CRIJ 1301	CRIJ 1306	CRIJ 1310	CRIJ 2313
CRIJ 2328	Approved Electives (6 semester hours)		
Approved Electives			
CRIJ 1307	CRIJ 1313	CRIJ 2314	CRIJ 2323
CRIJ 2301			

First Term	Credit
CRIJ 1301 or CJSA 1322–Introduction to Criminal Justice	3
CRIJ 2313 or CJCR 1307–Correctional Systems and Practices.....	3
CRIJ 2314 or CJSA 1342–Criminal Investigation	3
ENGL 1301–Composition I	3
Approved Elective	3
PHED Activity	1
	16

Second Term	Credit
CRIJ 1307 or CJSA 1312–Crime in America	3
CJLE 1333–Traffic Law and Investigation.....	3
Speech	3
PSYC 2301–General Psychology	3
Approved Elective	3
	15

Technical Programs

Third Term	Credit
*Humanities or Fine Arts	3
CRIJ 1306 or CJSA 1313—Court Systems and Practices	3
CRIJ 1310 or CJSA 1327—Fundamentals of Criminal Law	3
SOCI 1301—Introduction to Sociology	3
ENGL 2311—Technical Report Writing	3

15

Fourth Term	Credit
CRIJ 2323 or CJSA 2300—Legal Aspects of Law Enforcement	3
CRIJ 2328 or CJSA 1359—Police Systems and Practices	3
BCIS 1305 Business Computer Applications or ITSC 1309—Integrated Software Applications I	3
MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3

12

Associate of Applied Science Degree Total **62**

Capstone Experience: CRIJ 2323/CJSA 2300

Approved Electives

CJLE 1327	CJSA 1308	CJSA 1348
CJSA 1351	CJSA 2388	CRIJ 1313/CJSA 1317
EMSP 1305	PSYC 2319	SPAN 1411

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Core Criminal Justice (4CRIJ-CORE)

Certificate of Technology

Central and North Campuses

First Term	Credit
CRIJ 1301—Introduction to Criminal Justice.....	3
CRIJ 1306—Court Systems and Practices	3
CRIJ 1310 Fundamentals of Criminal Law.....	3
Approved Elective	3
Approved Elective	3
CRIJ 2313—Corrections Systems and Practices	3
CRIJ 2328—Police Systems and Practices	3

21

Certificate of Technology Total **21**

Capstone Experience: CRIJ 2313 or CRIJ 2328

Approved Electives

CRIJ 1307	CRIJ 1313	CRIJ 2301
CRIJ 2314	CRIJ 2323	

Law Enforcement Option (4CRIJ-LE)

Certificate of Technology

Central and North Campuses

First Term	Credit
CRIJ 1301 or CJSA 1322—Introduction to Criminal Justice	3
CRIJ 1306 or CJSA 1313—Court Systems and Practices	3
CJSA 1351—Use of Force	3
CRIJ 2328 or CJSA 1359—Police Systems and Practices	3
CJLE 1327—Interviewing and Report Writing for Criminal Justice Professions.....	3
CRIJ 2314 or CJSA 1342—Criminal Investigation	3

18

Second Term **Credit**

CRIJ 2323 or CJSA 2300—Legal Aspects of Law Enforcement	3
CJLE 1333—Traffic Law and Investigation.....	3
CJSA 1348—Ethics in Criminal Justice.....	3
CRIJ 1310 or CJSA 1327—Fundamentals of Criminal Law	3
Approved Elective	3

15

Certificate of Technology Total

33

Capstone Experience: CRIJ 2323/CJSA 2300

Approved Electives

CJSA 1308	CRIJ 1307/CJSA 1312
EMSP 1305	CJSA 2388 CRIJ 1313/CJSA 1317
SPAN 1411	CRIJ 2313/CJCR 1307

Social Services Option (3CRIJ-SS)

Associate of Applied Science Degree

Central and North Campuses

First Term	Credit
CRIJ 1301 or CJSA 1322—Introduction to Criminal Justice	3
CRIJ 2313 or CJCR 1307—Correctional Systems and Practices.....	3
CRIJ 2314 or CJSA 1342—Criminal Investigation	3
ENGL 1301—Composition I	3
BCIS 1305—Business Computer Applications or ITSC 1309—Integrated Software Applications I	3
PHED Activity	1

16

Second Term **Credit**

CRIJ 1307 or CJSA 1312—Crime in America	3
CRIJ 2301—Community Resources in Corrections or CJCR 1304—Probation and Parole.....	3
CRIJ 1313 or CJSA 1317—Juvenile Justice System	3
Speech.....	3
PSYC 2301—General Psychology	3
PHED Activity	1

16

Technical Programs

Corrections Option (4CRIJ-CORR)

Third Term	Credit
CRIJ 1306 or CJSA 1313—Court Systems and Practices	3
CRIJ 1310 or CJSA 1327—Fundamentals of Criminal Law	3
SOCI 1301—Introduction to Sociology	3
ENGL 2311—Technical Report Writing	3
Approved Elective	3

15

Fourth Term	Credit
CRIJ 2328 or CJSA 1359—Police Systems and Practices	3
CJCR 2325—Legal Aspects of Corrections	3
*Humanities or Fine Arts	3
Approved Elective	3
MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3

15

Associate of Applied Science Degree Total 62

Capstone Experience: CJCR 2325

Approved Electives

CJLE 1327	CJSA 1348	CJSA 2300
CJSA 2388	CRIJ 2323	PSYC 2319
SPAN 1411		

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Social Services Option (4CRIJ-SS)

Certificate of Technology

Central and North Campuses

First Term	Credit
CRIJ 1306 or CJSA 1313—Court Systems and Practices	3
CRIJ 2328 or CJSA 1359—Police Systems and Practices	3
CRIJ 2323 or CJSA 2300—Legal Aspects of Law Enforcement	3
CRIJ 2301—Community Resources in Corrections or CJCR 1304 Probation and Parole	3
CRIJ 1313 or CJSA 1317—Juvenile Justice System	3

15

Second Term	Credit
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CRIJ 1307 or CJSA 1312—Crime in America	3
CRIJ 1310 or CJSA 1327—Fundamentals of Criminal Law	3
Approved Elective	3
CJCR 2325—Legal Aspects of Corrections	3
CJLE 1327—Interviewing and Report Writing for Criminal Justice Professions.....	3

15

Certificate of Technology Total 33

Capstone Experience: CJCR 2325

Approved Electives

CJCR 1304	CJSA 1348	CJSA 2388
EMSP 1305	CRIJ 2313/CJCR 1307	
PSYC 2319	SPAN 1411	

Certificate of Technology

Central and North Campuses

First Term	Credit
CJLE 1327—Interviewing - Report	3
CJCR 2325—Legal Aspects of Corrections	3
CRIJ 1306 or CJSA 1313—Court Systems and Practices	3
CRIJ 1301 or CJSA 1322—Introduction to Criminal Justice	3
CRIJ 2328/CJSA 1359—Police Systems and Practices	3
CRIJ 2323 or CJSA 2300—Legal Aspects of Law Enforcement	3

18

Second Term	Credit
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Major Internship or Elective.....	3
Police Systems and Practices.....	3
Correctional Practices.....	3
Community Resources	3
Crime in America	3

15

Certificate of Technology Total 33

Capstone Experience: CJCR 2325

Approved Electives

CJSA 1348	CJSA 2388	CJSA 2364
EMSP 1305	SPAN 1411	PSYC 2319

Crime Scene Technician (4CRIJ-CSTS)

Certificate of Technology

Central and North Campuses

First Term	Credit
CRIJ 1301 or CJSA 1322—Introduction to Criminal Justice	3
CRIJ 1306 or CJSA 1313—Court Systems and Practices	3
CRIJ 2328 or CJSA 1359—Police Systems and Practices	3
CRIJ 1310 or CJSA 1327—Fundamentals of Criminal Law	3
CRIJ 2314 or CJSA 1342—Criminal Investigations	3
CJSA 1308—Criminalistics I.....	3

18

Technical Programs

Second Term	Credit
DFTG 1409–Basic Computer-Aided Drafting.....	4
CJSA 2323–Criminalistics II.....	3
Approved Elective.....	3
CJLE 1327–Interviewing and Report Writing for Criminal Justice Professions.....	3
CRIJ 2323 or CJSA 2300–Legal Aspects of Law Enforcement.....	3

16
34

Certificate of Technology Total

Capstone: CRIJ 2323/CJSA 2300

Approved Electives

CJSA 2388 CJSA 2364 CRIJ 1307/CJSA 1312
SPAN 1411

Basic Fire and Arson Investigator

Certificate

Central and North Campuses

Persons possessing a regular Texas Peace Officer License issued by TCLEOSE (Texas Commission on Law Enforcement Officer Standards and Education) may enroll in the fire and arson investigator courses FIRT 1303 and FIRT 2333, and then complete the curriculum to become eligible for an Arson Investigator Credential through the Texas Commission on Fire Protection. Persons with a Texas Peace Officer License and Fire and Arson Investigator Credential may work in a police department in the Fire and Arson Investigator Division. The Texas Peace Officer License may be obtained by completing the certificate of technology peace officer licensure option and passing the required state examination.

Culinary Arts

Culinary Arts - Chef Training (3CULA-C)

Associate of Applied Science Degree

Central Campus

The culinary arts program provides basic education and training for cooks and apprentice chefs. Sequential courses provide for development of technical food preparation and service skills, understanding of the principles of food and beverage composition, experience in the use and maintenance of professional food service equipment, and basic development of supervisory skills.

First Term	Credit
CHEF 1305–Sanitation and Safety.....	3
CHEF 1401–Basic Food Preparation.....	4
RSTO 1325–Purchasing for Hospitality Operations.....	3
PSTR 1401–Fundamentals of Baking.....	4
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra.....	3

17

Second Term

Second Term	Credit
IFWA 1305–Food Service Equipment and Planning.....	3
RSTO 1313–Hospitality Supervision.....	3
RSTO 2405–Management of Food Production and Service.....	4
CHEF 2402–Saucier.....	4
Speech.....	3

17

Third Term

Third Term	Credit
Approved Electives.....	10
IFWA 1318–Nutrition for the Food Service Professional or HECO 1322–Nutrition and Diet Therapy.....	3
ENGL 1301–Composition I.....	3
PHED Activity.....	1

17

Fourth Term

Fourth Term	Credit
RSTO 2301–Principles of Food and Beverage Controls.....	3
CHEF 2365–Practicum (or Field Experience)–Culinary Arts/Chef Training or RSTO 2365–Practicum (or Field Experience)–Restaurant, Culinary, and Catering Management/Manager.....	3
**Behavioral or Social Science.....	3
**Humanities or Fine Arts.....	3
PSTR 2431–Advanced Pastry Shop.....	4
PHED Activity.....	1

17

Associate of Applied Science Degree Total

68

Capstone Experience: CHEF 2365 or RSTO 2365

* College preparatory courses (those courses which have numbers beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives

CHEF 1345 CHEF 2365 IFWA 2441
RSTO 1301 CHEF 1313

Technical Programs

Technical Programs

Culinary Arts Chef Training (4CULA-C)

Certificate of Technology

Central Campus

First Term	Credit
CHEF 1305–Sanitation and Safety.....	3
CHEF 1401–Basic Food Preparation.....	4
RSTO 1313–Hospitality Supervision.....	3
RSTO 1325–Purchasing for Hospitality Operations.....	3
IFWA 1318–Nutrition for the Food Service Professional or HECO 1322–Nutrition and Diet Therapy.....	3
	16

Second Term	Credit
RSTO 2301–Principles of Food and Beverage Controls.....	3
PSTR 1401–Fundamentals of Baking.....	4
Approved Electives.....	9
	16

Third Term	Credit
CHEF 2365–Practicum (or Field Experience)–Culinary Arts/Chef Training or RSTO 2365–Practicum (or Field Experience)–Restaurant, Culinary, and Catering Management/Manager.....	3
Approved Electives.....	7
	10

Certificate of Technology Total **42**

Capstone Experience: CHEF 2365 or RSTO 2365

Approved Electives		
CHEF 1313	CHEF 1345	CHEF 2365
CHEF 2402	IFWA 1305	IFWA 2441
PSTR 2431	RSTO 1301	RSTO 2365
RSTO 2405		

Culinary Arts (3CULA)

Associate of Applied Science Degree

North Campus

The culinary arts program provides basic education and training for student chefs. Culinary courses teach development of technical food preparation and service skills. Student chefs also learn principles of food and beverage composition, experience use and maintenance of commercial restaurant equipment, and develop basic supervisory skills.

First Term	Credit
IFWA 2446–Quantity Procedures.....	4
CHEF 1305–Sanitation and Safety.....	3
CHEF 1301–Basic Food Preparation.....	3
PSTR 1301–Fundamentals of Baking.....	3
RSTO 2301–Principles of Food & Beverage Control.....	3
PHED Activity.....	1
	17

Second Term

CHEF 1345–International Cuisine.....	3
RSTO 2431–Food Service Management.....	4
RSTO 1313–Hospitality Supervision.....	3
CHEF 2301–Intermediate Food Preparation.....	3
PSTR 2331–Advanced Pastry Shop.....	3
	16

PostY1Summer

CHEF 1310–Garde Manger.....	3
IFWA 1318–Nutrition for Food Service Professional.....	3
CHEF 2365–Practicum (or Field Experience)–Culinary Arts/Chef Training.....	3
	9

Third Term

ENGL 1301–Composition I.....	3
SPCH 1321–Business & Professional Speech.....	3
MATH 1314–College Algebra or MATH 1333–Contemporary Math for Tech.....	3
*Behavioral or Social Science.....	3
PHED Activity.....	1
	13

Fourth Term

*Humanities or Fine Arts.....	3
MRKG 1311–Principles of Marketing.....	3
ITSC 1309–Integrated Software Applications I or BCIS 1305–Business Computer Applications.....	3
	9

Associate of Applied Science Degree Total **64**

Capstone Experience:CHEF 2365

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Culinary Arts (4CULA)

Certificate of Technology

North Campus

The pastry chef program provides students an opportunity to specialize in baking and pastry. Courses in cake decorating, chocolates, confection sugars, and bakeshop production prepare students to become a pastry chef. Pastry chef students will spend time learning from award-winning chef instructors and learn to operate in a state-of-the-art kitchen and bakery.

Technical Programs

First Term	Credit
IFWA 2446–Quantity Procedures.....	4
CHEF 1305–Sanitation and Safety.....	3
CHEF 1301–Basic Food Preparation.....	3
PSTR 1301–Fundamentals of Baking.....	3
RSTO 2301–Prin of Food & Beverage Cont.....	3
	16

Second Term	Credit
CHEF 1345–International Cuisine.....	3
RSTO 2431–Food Service Management.....	4
RSTO 1313–Hospitality Supervision.....	3
CHEF 2301–Intermediate Food Prep.....	3
PSTR 2331–Advanced Pastry Shop.....	3
	16

PostY1Summer	Credit
IFWA 1318–Nutrition for FS Professional.....	3
CHEF 1310–Garde Manger.....	3
CHEF 2365–Pract-Culinary Arts/Chef Train.....	3
	9

Certificate of Technology Total **41**
Capstone Experience: CHEF 2365

Pastry Chef Specialty (3CULA-PC)

Associate of Applied Science Degree

North Campus

The purpose of the pastry chef program is to provide students with an opportunity to specialize their degree plan in baking and pastry. Program graduates will acquire relevant knowledge and skills that will prepare them to work in this exciting industry. Pastry chef students will learn cake decorating, chocolates and confection sugars, bakeshop production, plate presentation, fundamentals of baking, food and beverage cost control, nutritional components of food and desserts, and basic supervisory skills.

First Term	Credit
CHEF 1305–Sanitation and Safety.....	3
RSTO 2301–Principles of Food and Beverage Controls.....	3
PSTR 1306–Cake Decorating I.....	3
PSTR 1301–Fundamentals of Baking.....	3
PSTR 1342–Quantity Bakeshop Production.....	3
PHED Activity.....	1
	16

Second Term	Credit
PSTR 2301–Chocolates and Confections.....	3
PSTR 2307–Cake Decorating II.....	3
RSTO 1313–Hospitality Supervision.....	3
PSTR 2365–Practicum (or Field Experience) - Baking and Pastry Arts/Baker/Pastry Chef.....	3
PSTR 2331–Advanced Pastry Shop.....	3
	15

PostY1Summer	Credit
IFWA 1318–Nutrition for the Food Service Professional.....	3
CHEF 1310–Garde Manger.....	3
	6

Third Term	Credit
ENGL 1301–Composition I.....	3
SPCH 1321–Business and Professional Speech.....	3
MATH 1314–College Algebra and MATH 1333–Contemporary Mathematics.....	3
PHED Activity.....	1
*Humanities and Visual/Performing Arts.....	3
	13

Fourth Term	Credit
*Behavioral or Social Science.....	3
MRKG 1311–Principles of Marketing.....	3
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I.....	3
ENGL 2311–Technical Report Writing.....	3
	12

Associate of Applied Science Degree Total 62

Capstone Experience: PSTR 2365

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences of the Transfer Core Curriculum.

Pastry Chef Specialty (4CULA-PC)

Certificate of Technology

North Campus

First Term	Credit
CHEF 1305–Sanitation and Safety.....	3
RSTO 2301–Principles of Food and Beverage Controls.....	3
PSTR 1306–Cake Decorating I.....	3
PSTR 1301–Fundamentals of Baking.....	3
PSTR 1342–Quantity Bakeshop Production.....	3
	15

Technical Programs

Second Term	Credit
PSTR 2301—Chocolates and Confections.....	3
PSTR 2307—Cake Decorating II.....	3
RSTO 1313—Hospitality Supervision.....	3
PSTR 2331—Advanced Pastry Shop.....	3
	12

Third Term	Credit
IFWA 1318—Nutrition for the Food Service Professional.....	3
PSTR 2365—Practicum (or Field Experience) - Baking and Pastry Arts/Baker/Pastry Chef.....	3
	6

Certificate of Technology Total 33
Capstone Experience: PSTR 2365

Culinary Arts Pastry and Garde Manger (MCULA-P)

Marketable Skills Achievement Award

North Campus

First Term	Credit
PSTR 1301—Fundamentals of Baking.....	3
CHEF 1205—Sanitation and Safety.....	2
PSTR 2331—Advanced Pastry Shop.....	3
CHEF 1310—Garde Manger.....	3
	11

Diesel Technology

Diesel Technology (3DEMR)

Associate of Applied Science Degree

North Campus

Diesel technology is a course of study designed to prepare the student for a career in the repair and maintenance of diesel engines, heavy truck transmissions, brakes, and differentials.

A graduate of this two-year program is awarded the associate of applied science degree.

First Term	Credit
DEMR 1306—Diesel Engine I.....	3
DEMR 1410—Diesel Engine Testing and Repair I.....	4
DEMR 1405—Basic Electrical Systems.....	4
DEMR 1423—Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair.....	4
PHED Activity.....	1
	16

Second Term	Credit
DEMR 2412—Diesel Engine Testing and Repair II.....	4
DEMR 1421—Power Train I.....	4
DEMR 1317—Basic Brake Systems.....	3
DEMR 2432—Electronic Controls.....	4
PHED Activity.....	1
	16

Third Term	Credit
DEMR 1301—Shop Safety and Procedures.....	3
DEMR 1449—Diesel Engine II.....	4
DEMR 2334—Advanced Diesel Tune-up and Troubleshooting.....	3
DEMR 2266—Field Experience—Diesel Engine Mechanic and Repair.....	2
	12

Fourth Term	Credit
ENGL 1301—Composition I.....	3
MATH 1333—Contemporary Mathematics or MATH 1314 College Algebra.....	3
ENGL 2311—Technical Report Writing.....	3
SPCH 1321—Business and Professional Speech.....	3
*Behavioral or Social Science.....	3
*Humanities or Fine Arts.....	3
	18

Associate of Applied Science Degree Total 62
Capstone Experience: DEMR 2266

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Diesel Technology (4DEMR)

Certificate of Technology

North Campus

First Term	Credit
DEMR 1306—Diesel Engine I.....	3
DEMR 1410—Diesel Engine Testing and Repair I.....	4
DEMR 1405—Basic Electrical Systems.....	4
DEMR 1423—Heating, Ventilation, and Air Conditioning (HVAC) Troubleshooting and Repair.....	4
	15

Second Term	Credit
DEMR 2412—Diesel Engine Testing and Repair II.....	4
DEMR 1421—Power Train I.....	4
DEMR 1317—Basic Brake Systems.....	3
DEMR 2432—Electronics Controls.....	4
	15

Technical Programs

Third Term	Credit
DEMR 1301–Shop Safety and Procedures.....	3
DEMR 1449–Diesel Engine II.....	4
DEMR 2334–Advanced Diesel Tune-up and Troubleshooting	3
DEMR 2266–Practicum (or Field Experience) - Diesel Mechanics Technology/Technician	2
	12
Certificate of Technology Total	42
Capstone Experience: DEMR 2266	

Dietetics

Food Service Management (3DIET-FSVC)

Associate of Applied Science Degree

Central Campus

The food service management program is designed to prepare students for employment in food service operations as managers, supervisors, dietary technicians or in other related occupations in the food industry. Graduates will have an understanding of problems in these fields and experience in use of materials and equipment related to them, and will have participated in on-the-job training to practice skills and acquire experience.

First Term	Credit
RSTO 1325–Purchasing for Hospitality Operations	3
CHEF 1313–Food Service Operation/Systems	3
CHEF 1401–Basic Food Preparation.....	4
CHEF 1305–Sanitation and Safety.....	3
IFWA 1318–Nutrition for the Food Service Professional or HECO 1322–Principles of Nutrition	3
PHED Activity	1
	17

Second Term	Credit
RSTO 2405–Management of Food Production and Service.....	4
Approved Electives	8
	12

Third Term	Credit
Approved Electives	6
FDNS 1309–Nutrition in the Community.....	3
SPCH 1321–Business and Professional Speech	3
ENGL 1301–Composition I	3
PHED Activity	1
	16

Fourth Term	Credit
RSTO 2365–Practicum–Food and Beverage/Restaurant Operations Manager	3
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
RSTO 2301–Principles of Food and Beverage Controls.....	3
**Behavioral or Social Science	3
**Humanities or Fine Arts	3
	15
Associate of Applied Science Degree Total	71

Capstone Experience: RSTO 2365

* College preparatory courses (those courses beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Science Electives

BIOL 1413	BIOL 2401	BIOL 2402
BIOL 2420	CHEM 1411	CHEM 1412

Food Service Management (4DIET-FSVC)

Certificate of Technology

Central Campus

First Term	Credit
CHEF 1305–Sanitation and Safety.....	3
CHEF 1313–Food Service Operation/Systems	3
CHEF 1401–Basic Food Preparation	4
FDNS 1309–Nutrition in the Community.....	3
RSTO 1313–Hospitality Supervision	3
	16

Second Term	Credit
IFWA 1318–Nutrition for the Food Service Professional or HECO 1322–Principles of Nutrition	3
RSTO 1325–Purchasing for Hospitality Operations	3
RSTO 2365–Practicum–Food and Beverage/Restaurant Operations Manager	3
RSTO 2301–Principles of Food and Beverage Controls.....	3
RSTO 2405–Management of Food Production and Service.....	4
	16

Third Term	Credit
Approved Electives	10
	10
Certificate of Technology Total	42

Capstone Experience: RSTO 2365

Approved Electives

CHEF 1345	CHEF 2365	CHEF 2402
DITA 1400	DITA 1401	FDNS 1168
IFWA 1305	IFWA 2441	FMLD 1372
PSTR 1401	PSTR 2431	

Drafting Technology

See *Engineering Design Graphics*

Electrical Technology

Electrical Technology (3ELEC)

Associate of Applied Science Degree

Central and North Campuses

The electrical technology curriculum is designed to provide basic training for students to fill entry-level positions in the fields of construction, maintenance, design, marketing, residential, industrial, commercial, and other electrical-related industries.

The program will also allow electrical workers to upgrade their skills as they gain on-the-job experience.

First Term	Credit
ELPT 1215–Electrical Calculations I	2
ELPT 1311–Basic Electrical Theory	3
ELPT 1325–National Electrical Code I	3
ELPT 1429–Residential Wiring	4
ITSC 1309–Integrated Software Applications or CPMT 1303–Introduction to Computer Technology or BCIS 1305–Computer Applications	3
PHED Activity	1
	16
Second Term	Credit
ELPT 1345–Commercial Wiring.....	3
ELPT 1351–Electrical Machines.....	3
ELPT 2325–National Electrical Code II.....	3
ELPT 2215–Electrical Calculations II.....	2
MATH 1333–Contemporary Mathematics	3
ENGL 1301–Composition I	3
	17
Third Term	Credit
ELPT 1441–Motor Control.....	4
ELPT 2343–Electrical Systems Design or Approved Elective.....	3
*Behavioral or Social Science	3
Speech	3
ELPT 2305–Motors and Transformers	3
	16

Technical Programs

Fourth Term	Credit
ELPT 2337–Electrical Planning and Estimating	3
ELPT 2319–Programmable Logic Controllers I or Approved Elective.....	3
ELPT 2364–Practicum–Electrical and Power Transmission Installation/ Installer, General or Major Elective.....	3
*Humanities or Fine Arts	3
PHED Activity	1
ENGL 2311–Technical Report Writing.....	3
	16

Associate of Applied Science Degree Total

16
65

Capstone Experience: ELPT 2337

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives		
EECT 1340	ELPT 1355	ELPT 1357
ELPT 1440	ELPT 2301	ELPT 2319
ELPT 2343	ELPT 2364	ELPT 2449

Electrical Technology (4ELEC-TEC)

Certificate of Technology

All Campuses

First Term	Credit
ELPT 1215–Electrical Calculations I	2
ELPT 1311–Basic Electrical Theory	3
ELPT 1325–National Electrical Code I	3
ELPT 1345–Commercial Wiring.....	3
ELPT 1351–Electrical Machines.....	3
ELPT 1429–Residential Wiring	4
	18
Second Term	Credit
ELPT 1441–Motor Control.....	4
ELPT 2215–Electrical Calculations II	2
ELPT 2325–National Electrical Code II.....	3
ELPT 2343–Electrical Systems Design or Approved Elective.....	3
ELPT 2305–Motors and Transformers	3
ELPT 2364–Practicum–Electrical and Power Transmission Installation/ Installer, General or Approved Elective.....	3
	18
	36

Certificate of Technology Total

Capstone Experience: ELPT 2215

Approved Electives		
EECT 1340	ELPT 1355	ELPT 1357
ELPT 1440	ELPT 2301	ELPT 2319
ELPT 2337	ELPT 2449	

Technical Programs

Electrical Technology (6ELEC-TEC)

Occupational Certificate

All Campuses

First Term	Credit
ELPT 1215–Electrical Calculations I	2
ELPT 1311–Basic Electrical Theory	3
ELPT 1325–National Electrical Code I	3
ELPT 1429–Residential Wiring	4
ELPT 1345–Commercial Wiring.....	3
	15

Capstone Experience: ELPT 1345

Electrical Technology

Certificate of Technology

Continuing Education

Central and North Campuses

	Contact Hours
IEIR 1002–Direct Current	128
IEIR 1012–Distribution Systems	128
IEIR 1006–Electric Motors.....	128
IEIR 2043–Electrical Systems Design	128
Certificate of Technology Total	512
Capstone Experience: ELPT 2043	

Electronics Technology

Electronics Technology (3ELECTRON)

Associate of Applied Science Degree

Central and South Campuses

The electronics technology curriculum is designed to provide basic training for entry-level jobs in a variety of occupations in the field of electronics, telecommunications, automation, sensors, and computer engineering technology. A graduate of this program will have a good foundation in the principles of electronics with an emphasis on digital electronics and computers. The program provides training in advanced microprocessor applications and basic automation and robotics.

Graduates from this program should be capable of completing technical assignments in the fields of digital electronics, analog electronics, communications, and computer maintenance. The computer maintenance components of this program conform to the A+ and Net+ certification guidelines.

First Term	Credit
CETT 1303–DC Circuits	3
CETT 1325–Digital Fundamentals	3
ENGL 1301–Composition I	3
Speech	3
ITSC 1305–Introduction to PC Operating Systems.....	3
*MATH 1333–Contemporary Mathematics or MATH 1314 College Mathematics	3
PHED Activity	1
	19

Second Term	Credit
CETT 1305–AC Circuits.....	3
CETT 1349–Digital Systems.....	3
CETT 1329–Solid State Devices	3
RBTC 1355–Sensors.....	3
CPMT 2345–Computer System Troubleshooting or Approved Elective	3
PHED Activity	1
	16

Third Term	Credit
ELMT 2341–Electromechanical Systems or ELPT 2319–Programmable Logic Controllers I	3
CETT 1357–Linear Integrated Circuits.....	3
CPMT 1349 Computer Networking Technology or ITCC 1401 Cisco Exploration 1 - Network Fundamentals.....	3
ELMT 2333–Industrial Electronics.....	3
ENGL 2311–Technical Report Writing	3
**Humanities or Fine Arts	3
	18

Fourth Term	Credit
EECT 1340–Telecommunications Transmission Media or Approved Elective	3
CETT 2449–Research and Project Design or Approved Elective.....	3
EECT 1307–Convergence Technologies or Approved Elective.....	3
ELMT 2335 Certified Electronics Technician Training or EECT 2367 Practicum (or Field Experience) - Electrical, Electronic and Communications Engineering Technology/Technician.....	3
**Behavioral or Social Science	3
	15

Associate of Applied Science Degree Total	Credit	
Capstone Experience: EECT 2367	69	
Approved Electives		
EECT 2439	ITCC 1404	ITSC 1321
ITCC 2408	ITSC 1305	ELMT 1305
FCEL 1405		

* Students planning to pursue a baccalaureate degree should enroll in MATH 1314.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Technical Programs

Technical Programs

Electronics Technology (4ELECTRON)

Certificate of Technology

Central and South Campuses

The Certificate of Technology in Electronics Technology satisfies the basic technical requirements for a technician in support of electronics installation, fabrication, and troubleshooting associated with communications and embedded electronics applications. The student will design, build, and troubleshoot basic analog and digital circuits, as well as interface these circuits to systems using microprocessors and micro controllers.

First Term	Credit
CETT 1303–DC Circuits	3
CETT 1325–Digital Fundamentals	3
ITSC 1325–Personal Computer Hardware	3
	9

Second Term	Credit
CETT 1305–AC Circuits.....	3
CETT 1349–Digital Systems.....	3
CETT 1329–Solid State Devices.....	3
CETT 2345–Computer System Troubleshooting or Approved Elective.....	3
	12

Third Term	Credit
RBTC 1355–Sensors and Automation.....	3
EECT 1340–Telecommunications Transmission Media	3
EECT 2439–Communications Circuits or Approved Elective	3
ELMT 2341–Electromechanical Systems or ELPT 2319–Programmable Logic Controllers I.....	3
	12

Certificate of Technology Total **33**

Capstone Experience: CPMT 2345

Approved Electives		
CETT 2449	EECT 2439	CETT 1357
CPMT 1349	ITCC 1401	ITSC 1321
EECT 1307	ITCC 1404	ITCC 2408
FCEL 1405	ELMT 2335	

Emerging Electronics Technology (4ELEC-EMRG)

Certificate of Technology

Central Campus

The Emerging Electronics Technology Certificate of Technology is designed to prepare the electronics technician to work with the new automated systems used in security, home automation, commercial, and renewable power systems. The student will study common electronic instrumentation systems used to measure and control a wide variety of processes, along with proper diagnostic and repair procedures. Each course will have a laboratory section where students will have the opportunity to practice the concepts and procedures studied in the classroom. Upon completion of this program, the student should be able to enter the job market as a member of a team of technicians that install, service, and maintain all systems.

First Term	Credit
CETT 1303–DC Circuits	3
CETT 1325–Digital Fundamentals	3
ITSC 1325–Personal Computer Hardware	3
ELMT 1305–Basic Fluid Power	3
INTC 1301–Principles of Industrial Measurements I	3
	15

Second Term	Credit
CETT 1305–AC Circuits.....	3
CETT 1349–Digital Systems.....	3
CETT 1329–Solid State Devices.....	3
RBTC 1355–Sensors.....	3
CPMT 1349–Computer Networking Technology or ITCC 1401–Cisco Exploration 1 - Network Fundamentals.....	3
	15

Third Term	Credit
ELMT 2341–Electromechanical Systems or ELPT 2319–Programmable Logic Controllers I.....	3
CETT 1357–Linear Integrated Circuits.....	3
ELMT 2333–Industrial Electronics.....	3
FCEL 1405–Fuel Cell and Alternative/Renewable Energy or CETT 2449–Research and Project Design	4
EECT 1307 Convergence Technologies or Approved elective	3
	16

Certificate of Technology Total: **46**

Capstone Experience: ELMT 2333

Approved Electives		
CPMT 2345	EECT 1340	ITSC 1305

Technical Programs

Electronics Communications Technology (6ELCTR-NCOMM)

Occupational Certificate

Central Campus

Electronics communication technology builds an understanding of basic analog and digital communication circuits used in radio and telephone systems. Students will apply techniques for installing and troubleshooting these systems in fields associated with radio, telephone, data-relay, and other communications systems.

First Term	Credit
CETT 1303—DC Circuits	3
CETT 1325—Digital Fundamentals	3
	6

Second Term	Credit
CETT 1305—AC Circuits.....	3
CETT 1329—Solid State Devices.....	3
CETT 1357—Linear Integrated Circuits.....	3
	9

Third Term	Credit
EECT 2439—Communications Circuits	4
EECT 1307—Convergence Technologies.....	3
ELMT 2335—Certified Electronics Technician Training.....	3
	10

Occupational Certificate Total **25**

Capstone Experience: EECT 2335

Electronics Maintenance Technology (6ELCTR-MT)

Specialty Occupational Certification

Central Campus

Students completing this certificate should be able to interface, configure, repair, and troubleshoot computer systems used in scientific, business, and industrial applications. All training is oriented toward setup and configuration of systems utilizing a variety of operating systems and hardware types. The training also prepares the student for application to the A+ and Net+ certification tests.

First Term	Credit
CETT 1303—DC Circuits	3
CETT 1325—Digital Fundamentals	3
ITSC 1305—Introduction to PC Operating Systems.....	3
	9

Second Term Credit

ITSC 1325—Personal Computer Hardware	3
CPMT 1349—Computer Networking Technology or ITCC 1401—Cisco Exploration 1 - Network Fundamentals.....	3
CPMT 2345—Computer System Troubleshooting or Approved Elective.....	3
	9

Third Term Credit

CPMT 2349—Advanced Computer Networking Technology or Approved Elective.....	3
EECT 1307—Convergence Technologies or Approved Elective.....	3
	6

Occupational Certificate Total: **24**

Capstone Experience: CPMT 2345

Approved Electives
ITCC 2408 ITCC 1404 EECT 1340

Emergency Medical Technology

A criminal background check and/or drug screening is required of all health science students attending clinical courses, or practicum, and may be required prior to admission to the program.

The emergency medical technology (EMT) curriculum includes a combination of class lectures, skills training and clinical training in hospital and ambulance settings. The EMT program at San Jacinto College meets Texas Department of State Health Services (TDSHS) and the National Registry of EMT's requirements for certification eligibility. Students registering for the emergency medical technology program must be potentially eligible to attempt TDSHS required the National Registry of EMT certification examination upon successful completion of the program. Any applicant convicted of a felony and/or misdemeanor offense may or may not be eligible for clinical participation and/or state certification.

Central and North Campuses

Programs are accredited by the Texas Department of State Health Services EMS and Trauma Systems, the Commission on Accreditation of Allied Health Education Programs (CAA-HEP), and the Committee on Accreditation of Educational Programs for the EMS Professions (CoAEMSP).

Students must meet departmental standards to take the National Registry certification examination. A fee is charged by the TDSHS and the National Registry of EMT's for certification examinations. There may also be additional charges for field experiences.

Technical Programs

The EMT program is designed for persons seeking positions in the emergency health care field, such as ambulance personnel, safety engineers, industrial nurses, rescue squad workers, child care personnel, policemen, and firemen, as well as anyone who supervises or is responsible for the safety and well being of a number of people.

Philosophy

The philosophy of the department of emergency medical technology adheres to the philosophy of San Jacinto College. Emergency medical technicians and paramedics provide pre-hospital emergency medical care, rescue, and transportation of the sick and injured.

EMS education is a lifetime process of increasing knowledge and skills appropriate to the ever-growing and changing field of emergency medicine. It is the responsibility of the faculty to design and implement the educational experiences needed for a student to establish the knowledge and job entry-level skills to practice pre-hospital emergency care and crisis intervention.

The department of emergency medical technology adheres to the curriculum set forth by the U.S. Department of Transportation, the Texas Department of State Health Services, the American Heart Association, the International Trauma Life Support Association and the American Academy of Pediatrics. Components of the curriculum include anatomical and physiological functions and dysfunctions, treatment modalities, rescue, management, advanced cardiovascular life support, international trauma life support, pediatric advance life support, pediatric education for pre-hospital providers, and ethical-legal responsibilities.

Anatomy and physiology requirements for the associate of applied science, certificate of technology, and occupational certificate require successful completion of the EMSP 1371 (Anatomy and Physiology for Emergency Care). However, those students planning to pursue a bachelor's degree and those planning to transition to other health sciences are advised to complete BIOL 2401 and BIOL 2402 (Anatomy and Physiology I and II), or to seek the advice of counselors or program advisors about the applicability and transferability of EMSP 1371, BIOL 2401 and BIOL 2402.

Computer literacy requirements for the associate of applied science degree require successful completion of ITSC 1309–Integrated Software Applications I or BCIS 1305 Business Computer Applications.

Objectives

Upon completion of the program, the emergency medical technology student should be able to:

- Demonstrate knowledge base and skills necessary for pre-hospital emergency medical care and patient management.
- Demonstrate accepted characteristics of professionalism and compassionate patient management.

- Utilize accepted knowledge and skills principles to provide emergency medical care in the pre-hospital setting.
- Utilize communication skills to establish and maintain effective interpersonal relationships in the realm of emergency medical care.
- Assume responsibility for continuing education to maintain professional competency and to meet state and national certification requirements.
- Function in the capacity of an emergency medical team leader.
- Participate as a member of the emergency medical services community in providing pre-hospital care, EMS system development, and education.
- Successfully pass the National Registry of EMTs registry examination for certification in the field of emergency medical services, as required for certification in the state of Texas.

Program Information

- Students registering for the emergency medical technology program must be potentially eligible to write the National Registry of EMTs certification exam upon successful completion of the program. An applicant convicted of a felony and/or misdemeanor offense may not be eligible for state certification.
- Students must be 18 years of age or older to be eligible to receive certification from the Texas Department of State Health Services. Students younger than 18 years of age should contact the EMT department prior to registration.
- Students must have a high school diploma or GED certificate to be eligible to receive certification from the Texas Department of State Health Services.
- Each EMSP student is required to pay the cost of the Texas Department of State Health Services and National Registry application fees and/or any associated fees directly to the Texas Department of State Health Services or National Registry of EMTs.
- Each EMSP student who registers for an EMSP clinical or practicum course (EMSP 1160, 1260, 2161, 2162, 2168) will be required to purchase appropriate clinical attire and equipment.
- Each student who registers for an EMSP clinical or practicum course (EMSP 1160, 1260, 2161, 2162, 2168) will be charged an insurance fee each term for malpractice liability insurance. It is strongly recommended that students have personal health insurance if enrolled in the above courses.
- A prescribed physical examination may be required for some clinical and ambulance rotations, based on affiliation agreements. In those cases, proof of the physical examination must be on file in the EMSP office prior to attending those rotations.

Technical Programs

- All students enrolled in health-related courses must show proof of one dose of vaccine administered on or after their first birthday or serological confirmation of immunity to measles/mumps/rubella. Vaccines for tetanus/diphtheria are required every 10 years after the dose obtained on or after the fourth birthday. Students must present proof of having taken a tuberculosis skin test in the past 12 months, demonstrating to be free of TB. Students must also declare to have had chicken pox previously or must have received a Varicella vaccination. Other immunizations may also be required by some clinical sites. Proof of current immunizations must be on file in the EMSP office prior to attending clinical or internship rotations.
- Clinical site and time assignments are made at the discretion of the College and its affiliates and are subject to change without notice.
- Each student is required to present proof of current CPR certification for health professionals from either the American Red Cross or the American Heart Association to complete EMSP 1160, 1260, 1305, 1338, 1355, 1356, 2161, 2162, 2168, 2243, 2330, 2348, and 2444. CPR training is included in the EMSP 1501 course.

Emergency Medical Technology (3EMT)

Associate of Applied Science Degree

Central and North Campuses

First Semester	Credit
EMSP 1371–Anatomy and Physiology for Emergency Care.....	3
EMSP 1501–Emergency Medical Technician	5
EMSP 1160–Clinical–Emergency Medical Technician–Basic.....	1
ENGL 1301–Composition I	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
	15

Second Term	Credit
EMSP 1338–Introduction to Advanced Practice	3
EMSP 1355–Trauma Management.....	3
EMSP 1356–Patient Assessment and Airway Management	3
ENGL 1302–Composition II or ENGL 2311–Technical Report Writing.....	3
EMSP 1260–Clinical–Emergency Medical Technician–Intermediate	2
PHED Activity	1
	15

Third Term	Credit
EMSP 2348–Emergency Pharmacology.....	3
EMSP 2444–Cardiology	4
EMSP 2161–Clinical–Emergency Medical Technician– Paramedic II	1
ITSC 1309–Integrated Software Applications I or BCIS 1305–Business Computer Applications	3
*Humanities or Fine Arts	3
	14

Fourth Term	Credit
EMSP 2434–Medical Emergencies.....	4
EMSP 2330–Special Populations.....	3
EMSP 2162–Clinical–Emergency Medical Technician– Paramedic II	1
Speech	3
*Behavioral or Social Science	3
PHED Activity	1
	15

Fifth Term	Credit
EMSP 2338–EMS Operations.....	3
EMSP 2243–Assessment Based Management	2
EMSP 2168–Practicum/Field Experience–Emergency Medical Technician–Paramedic.....	1
	6
Associate of Applied Science Degree Total	65

Capstone Experience: EMSP 2243 and EMSP 2168

Credential Exam: National Registry of EMT

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Emergency Medical Technology (4EMT)

Certificate of Technology Central and North Campuses

First Term	Credit
EMSP 1371–Anatomy and Physiology for Emergency Care.....	3
EMSP 1501–Emergency Medical Technician	5
EMSP 1160–Clinical - Emergency Medical Technician - Basic.....	1
EMSP 1338–Introduction to Advanced Practice	3
EMSP 1355–Trauma Management.....	3
EMSP 1356–Patient Assessment and Airway Management	3
EMSP 1260–Clinical - Emergency Medical Technician - Intermediate	2
EMSP 2348–Emergency Pharmacology.....	3
EMSP 2444–Cardiology	4

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Technical Programs

Engineering Design Graphics

All Campuses

Engineering design graphics is a highly-technical field where engineering data is communicated through the use of computer sciences, mathematics, technical language, and modern sociological environments. Contemporary engineering designers are employed in diverse and specialized disciplines of engineering graphics such as 3D technical animation, 3D solid modeling, architecture, electronics, topographic, mechanical, structural and piping.

The engineering design graphics department provides academic and occupational skills training for design drafters, engineering students and technicians, and design animator/modelers using proven traditional instructional methods as well as emerging technologies such as 3D technical animation and 3D solid modeling.

In a world that is ever-expanding, every commercially-developed product began as a detailed drawing. These detailed drawings originated from developmental sketches, design specifications and data supplied by product engineers or other technically skilled experts. Within the Houston metropolitan area, design drafters routinely specialize in disciplines such as piping, mechanical, architectural, electrical, structural and topographic. Rapidly growing fields of study include 3D technical animation and 3D solid modeling. Design drafters prepare construction documents that illustrate design features, detailed dimensions, and specifications used in the manufacture, fabrication, and installation of every product we use.

The engineering design graphics core curriculum features mechanical drawing, manual and computer-aided drafting courses, and mathematics. The balance of the curriculum includes courses in oral and written communication skills, behavioral or social sciences, physical education, and the humanities.

Based on high corporate demand for design drafters with discipline-specific skills, a student may choose to concentrate their efforts in a specialized field of study. A specialty associate of applied science (A.A.S.) and/or certificate of technology is available in one of four areas: architectural/civil/structural, mechanical, petro/industrial, and technical animation and modeling. Each curriculum is designed to provide training to employed design drafters wishing to upgrade their skills. Those seeking to upgrade their skills in a particular field of study may wish to obtain a certificate of specialization. This departmental certification requires only four to five classes concentrating in disciplines such as 3D solid modeling and design, 3D technical animation and rendering, architectural, civil, electrical, instrumentation, mechanical, piping or structural. 3D technical animation and 3D solid modeling are revolutionizing the design and presentation phases of product development. The engineering design graphics department is at the forefront in training for these new areas as well.

Second Term	Credit
EMSP 2161—Clinical - Emergency Medical Technician - Paramedic I	1
EMSP 2434—Medical Emergencies.....	4
EMSP 2330—Special Populations.....	3
EMSP 2162—Clinical - Emergency Medical Technician - Paramedic II	1
EMSP 2338—EMS Operations	3
EMSP 2243—Assessment Based Management	2
EMSP 2168—Practicum/Field Experience - Emergency Medical Technician - Paramedic	1

15

Certificate of Technology Total **42**

Capstone Experience: EMSP 2243 and EMSP 2168
Credential Exam: National Registry of EMT

Emergency Medical Technology (6EMT)

Occupational Certificate

Central and North Campuses

First Term	Credit
EMSP 1501—Emergency Medical Technician	5
Anatomy and Physiology	5
EMSP 1160—Clinical-Emergency Med Tech-Basic	1
EMSP 1338—Intro to Advanced Practice	3
EMSP 1355—Trauma Management.....	3
EMSP 1356—Patient Assessment/Airway Mgmt.....	3
EMSP 1260—Clinical - EMT - Intermediate	2

Occupational Certificate Total **22**

Capstone Experience: EMSP 1260

Emergency Medical Technology (6EMT-B&I)

EMT Basic and Intermediate Certificate

North Campus

First Term	Credit
EMSP 1501—Emergency Medical Technician	5
EMSP 1160—Clinical—Emerg Med Tech-Basic	1
EMSP 1338—Intro to Advanced Practice	3
EMSP 1355—Trauma Management.....	3
EMSP 1260—Clinical - EMT - Intermediate	2
EMSP 1356—Patient Assessment/Airway Mgmt.....	3

Basic and Intermediate Certificate Total **17**

Capstone Experience: EMSP 1260

Technical Programs

Technical Programs

Engineering Design Graphics (3DFTG)

Associate of Applied Science Degree

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
ENGL 1301–Composition I	3
PHED Activity	1
*Oral Communication.....	3
	15

Second Term	Credit
DFTG 2417–Descriptive Geometry	4
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
PHED Activity	1
	17

Third Term	Credit
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
*Behavioral or Social Science	3
	18

Fourth Term	Credit
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or DFTG 2438–Final Project–Advanced Drafting.....	3
ENGL 2311–Technical Report Writing.....	3
*Humanities or Visual/Performing Arts.....	3
	17

Associate of Applied Science Degree Total **67**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

A.A.S. degrees in multiple engineering design graphics specialties will not be awarded.

* Courses which satisfy these requirements are listed in the Oral Communication, Humanities and Visual/Performing Arts, and Behavioral and Social Sciences sections of the Associate of Arts Transfer Core Curriculum which is published in the San Jacinto Community College District Catalog.

Students must complete eight (8) courses in an engineering design graphics (EDG) discipline to qualify for an associate of applied science specialty degree. Those courses may be chosen from the following specialty disciplines:

Architectural/Civil/Structural Specialty
ARCE 1421 ARCE 1452 ARTV 1417
ARTV 2421 DFTG 2428
and three (3) EDG electives, excluding DFTG 1413

Mechanical Specialty
DFTG 1445 DFTG 2402 DFTG 2406
DFTG 2440 DFTG 2458
and three (3) EDG electives, excluding DFTG 1413

Petro/Industrial Specialty
ARCE 1452 DFTG 2423 DFTG 2445
DFTG 2407 DFTG 2421 or DFTG 2408
and three (3) EDG electives, excluding DFTG 1413

Engineering Design Graphics Electives (Choose three)
ARCE 1421 ARCE 1452 ARTV 1402
ARTV 1440 DFTG 1410 DFTG 1417
DFTG 1445 DFTG 2402 DFTG 2406
DFTG 2408 DFTG 2419 DFTG 2421
DFTG 2423 DFTG 2428 DFTG 2432
DFTG 2436 DFTG 2440 DFTG 2444
DFTG 2445 DFTG 2447 DFTG 2458
DFTG 2407

Engineering Design Graphics (4DFTG)

Certificate of Technology

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
	16

Second Term	Credit
DFTG 2417–Descriptive Geometry	4
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
DFTG 2386–Internship–Drafting and Design Technology/Technician, General or DFTG 2438–Final Project–Advanced Drafting	3
	15

Certificate of Technology Total **31-32**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Certificates in multiple engineering design graphics specialties will not be awarded.

Technical Programs

Engineering Design Graphics Electives (Choose four)		
ARCE 1421	ARCE 1452	ARTV 1402
ARTV 1440	DFTG 1410	DFTG 1417
DFTG 1445	DFTG 2402	DFTG 2406
DFTG 2408	DFTG 2419	DFTG 2421
DFTG 2423	DFTG 2428	DFTG 2432
DFTG 2436	DFTG 2440	DFTG 2445
DFTG 2447	DFTG 2458	DFTG 2407

Engineering Design Graphics Architectural/Civil/Structural Specialty (3DFT-A)

Associate of Applied Science Degree

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
ENGL 1301–Composition I	3
PHED Activity	1
*Oral Communication.....	3
	15

Second Term	Credit
DFTG 2417–Descriptive Geometry	4
Specialty Elective.....	4
Specialty Elective.....	4
Specialty Elective.....	4
PHED Activity	1
	17

Third Term	Credit
Specialty Elective.....	4
Specialty Elective.....	4
Engineering Design Graphics Elective	4
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
*Behavioral or Social Science	3
	18

Fourth Term	Credit
Specialty Elective.....	4
Specialty Elective.....	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or DFTG 2438–Final Project–Advanced Drafting	3
ENGL 2311–Technical Report Writing.....	3
*Humanities of Visual/Performing Arts.....	3
	17

Associate of Applied Science Degree Total 67-68

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Degrees in multiple engineering design graphics A.A.S. specialties will not be awarded.

Architectural/Civil/Structural Specialty Electives		
ARCE 1421	ARCE 1452	DFTG 1417
DFTG 2421	DFTG 2428	

Engineering Design Graphics Electives (Choose three)

ARCE 1421	ARCE 1452	ARTV 1402
ARTV 1440	DFTG 1410	DFTG 1417
DFTG 1445	DFTG 2402	DFTG 2406
DFTG 2407	DFTG 2408	DFTG 2419
DFTG 2421	DFTG 2423	DFTG 2428
DFTG 2432	DFTG 2436	DFTG 2440
DFTG 2444	DFTG 2445	DFTG 2447
DFTG 2458		

Engineering Design Graphics Architectural/Civil/Structural Specialty (4DFT-A)

Certificate of Technology

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
Specialty Elective.....	4
Specialty Elective.....	4
	16

Technical Programs

Technical Programs

Second Term	Credit
DFTG 2417–Descriptive Geometry	4
Specialty Elective.....	4
Specialty Elective.....	4
DFTG 2386–Internship–Drafting and Design Technology/Technician, General or DFTG 2438–Final Project–Advanced Drafting	3
	15

Certificate of Technology Total **31-32**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Certificates in multiple engineering design graphics specialties will not be awarded.

Architectural/Civil/Structural Specialty Electives		
ARCE 1421	ARCE 1452	DFTG 1417
DFTG 2421 or DFTG 2428		

Engineering Design Graphics Mechanical Specialty (3DFT-M)

Associate of Applied Science Degree

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer–Aided Drafting.....	4
ENGL 1301–Composition I	3
PHED Activity	1
*Oral Communication.....	3
	15

Second Term **Credit**

DFTG 2417–Descriptive Geometry	4
DFTG 1445–Parametric Modeling and Design.....	4
DFTG 2402–Machine Drafting.....	4
DFTG 2406–Machine Design - Pro E.....	4
PHED Activity	1
	17

Third Term **Credit**

DFTG 2440–Solid Modeling/Design.....	4
DFTG 2458–Advanced Machine Design	4
Engineering Design Graphics Elective	4
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
*Behavioral or Social Science	3
	18

Fourth Term	Credit
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or DFTG 2438–Final Project–Advanced Drafting.....	3
ENGL 2311–Technical Report Writing.....	3
*Humanities or Visual/Performing Arts.....	3
	17

Associate of Applied Science Degree Total **67-68**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Degrees in multiple engineering design graphics A.A.S. specialties will not be awarded.

* Courses which satisfy these requirements are listed in the Oral Communication, Humanities and Visual/Performing Arts, and Behavioral and Social Sciences sections of the Associate of Arts Transfer Core Curriculum which is published in the San Jacinto Community College District Catalog.

Mechanical Specialty Electives		
DFTG 1445	DFTG 2402	DFTG 2406
DFTG 2440	DFTG 2458	
Engineering Design Graphics Electives (Choose three)		
ARCE 1421	ARCE 1452	ARTV 1402
ARTV 1440	DFTG 1410	DFTG 1417
DFTG 1445	DFTG 2402	DFTG 2406
DFTG 2408	DFTG 2419	DFTG 2421
DFTG 2423	DFTG 2428	DFTG 2432
DFTG 2436	DFTG 2440	DFTG 2445
DFTG 2447	DFTG 2458	DFTG 2407

Engineering Design Graphics Mechanical Specialty (4DFT-M)

Certificate of Technology

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer–Aided Drafting.....	4
Mechanical Specialty Elective	4
Mechanical Specialty Elective	4
	16

Technical Programs

Second Term	Credit
DFTG 2417–Descriptive Geometry	4
Mechanical Specialty Elective	4
Mechanical Specialty Elective	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or	
DFTG 2438–Final Project–Advanced Drafting.....	3
	15

Certificate of Technology Total **31-32**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Certificates in multiple engineering design graphics specialties will not be awarded.

Mechanical Specialty Electives		
DFTG 2402	DFTG 2406	DFTG 2440
DFTG 1445 or DFTG 2458		

Engineering Design Graphics Petro/Industrial Specialty (3DFT-PI)

Associate of Applied Science Degree

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
ENGL 1301–Composition I	3
*Oral Communication.....	3
PHED Activity	1
	15

Second Term **Credit**

DFTG 2417–Descriptive Geometry	4
Specialty Elective.....	4
Specialty Elective.....	4
Specialty Elective.....	4
PHED Activity	1
	17

Third Term **Credit**

Specialty Elective.....	4
Specialty Elective.....	4
Engineering Design Graphics Elective	4
MATH 1333–Contemporary Mathematics or	
MATH 1314–College Algebra	3
*Behavioral or Social Science	3
	18

Fourth Term **Credit**

Major Elective	4
Major Elective	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or	
DFTG 2438–Final Project–Advanced Drafting.....	3
ENGL 2311–Technical Report Writing	3
*Humanities or Fine Arts	3
	17

Associate of Applied Science Degree Total **67-68**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Degrees in multiple engineering design graphics A.A.S. specialties will not be awarded.

* Courses which satisfy these requirements are listed in the Oral Communication, Humanities and Visual/Performing Arts, and Behavioral and Social Sciences sections of the Associate of Arts Transfer Core Curriculum which is published in the San Jacinto Community College District Catalog.

Petro/Industrial Specialty Electives

ARCE 1452	DFTG 2408	DFTG 2421
DFTG 2423	DFTG 2445	DFTG 2407

Engineering Design Graphics Major Electives (Choose three)

ARCE 1421	ARCE 1452	ARTV 1402
ARTV 1440	DFTG 1410	DFTG 1417
DFTG 1445	DFTG 2402	DFTG 2406
DFTG 2408	DFTG 2419	DFTG 2421
DFTG 2423	DFTG 2428	DFTG 2432
DFTG 2436	DFTG 2440	DFTG 2445
DFTG 2444	DFTG 2447	DFTG 2458
DFTG 2407		

Engineering Design Graphics Petro/Industrial Specialty (4DFT-PI)

Certificate of Technology

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
Petro/Industrial Specialty	4
Petro/Industrial Specialty	4
	16

Technical Programs

Second Term	Credit
DFTG 2417–Descriptive Geometry	4
Petro/Industrial Specialty	4
Petro/Industrial Specialty	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or	
DFTG 2438–Final Project–Advanced Drafting.....	3
	15

Certificate of Technology Total **31-32**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Certificates in multiple engineering design graphics specialties will not be awarded.

Petro/Industrial Specialty Electives

DFTG 2423 DFTG 2445 DFTG 2407
 DFTG 2421 or ARCE 1452 or DFTG 2408

Engineering Design Graphics Technical Animator/Modeler Specialty (3DFT-TA)

Associate of Applied Science

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
ENGL 1301–Composition I	3
*Oral Communication.....	3
PHED Activity	1
	15

Second Term **Credit**

DFTG 2417–Descriptive Geometry	4
Specialty Elective.....	4
Specialty Elective.....	4
ENGL 2311–Technical Report Writing.....	3
PHED Activity	1
	16

Third Term **Credit**

Specialty Elective.....	4
Specialty Elective.....	4
Approved Specialty Elective	4
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
*Humanities or Visual/Performing Arts.....	3
	18

Fourth Term	Credit
Engineering Design Graphics Elective	4
Engineering Design Graphics Elective	4
+DFTG 2386–Internship–Drafting and Design Technology/Technician, General or	
DFTG 2438–Final Project–Advanced Drafting.....	3
*Behavioral or Social Science	3
	14

Associate of Applied Science Total **63-64**

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

* Courses which satisfy these requirements are listed in the Oral Communication, Humanities and Visual/Performing Arts, and Behavioral and Social Sciences sections of the Associate of Arts Transfer Core Curriculum which is published in the San Jacinto Community College District Catalog.

Degrees in multiple engineering design graphics A.A.S. specialties will not be awarded.

Technical Animator/Modeler Specialty Electives (Choose four)

ARCE 1421 ARTV 1402 ARTV 1440
 DFTG 1445 DFTG 2440 DFTG 2447

Approved Specialty Electives (Choose one)

ARCE 1421 ARTV 1402 ARTV 1440
 DFTG 1445 DFTG 2406 DFTG 2440
 DFTG 2445 DFTG 2447 DFTG 2458

Engineering Design Graphics Electives (Choose two)

ARCE 1421 ARCE 1452 ARTV 1402
 ARTV 1440 DFTG 1410 DFTG 1417
 DFTG 1445 DFTG 2402 DFTG 2406
 DFTG 2408 DFTG 2419 DFTG 2421
 DFTG 2423 DFTG 2428 DFTG 2432
 DFTG 2436 DFTG 2440 DFTG 2444
 DFTG 2445 DFTG 2447 DFTG 2458
 DFTG 2407

Engineering Design Graphics Technical Animator/Modeler Specialty (4DFT-TA)

Certificate of Technology

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting.....	4
Specialty Elective.....	4
	12

Second Term **Credit**

DFTG 2417–Descriptive Geometry	4
Specialty Elective.....	4
Specialty Elective.....	4
	12

Technical Programs

The San Jacinto College eye care technology department consists of three levels of preparation. Students may obtain an occupational certificate, a certificate of technology, or their associate of applied science degree. This program is designed to correlate classroom and laboratory experience with clinical experience in ophthalmic offices and clinics.

The eye care technology program is accredited by the Commission on Accreditation of Ophthalmic Medical Programs (CoA-OMP). Those graduates of the associate of applied science degree program are eligible to petition for examination through the Joint Commission on Allied Health Personnel in Ophthalmology at the certified ophthalmic technician level. Graduates of any of the three levels are eligible to petition for examination through the American Board of Opticianry for certification as an optician and/or the National Contact Lens Examiner.

The program requires formal entry via departmental interview. Only those students who have been officially admitted to the College and have met all College admission criteria will be considered. The eye care technology department accepts new students each Fall term. Students who miss the Fall entry may discuss Spring or Summer alternate entry options with the program director. The program offers both day and evening course as well as hybrid and online courses.

After acceptance into the program, the student must have a physical examination by a licensed professional and documentation of updated immunizations. A valid Healthcare Provider CPR card must be submitted as well.

Eye care technology students must earn a C or better in all eye care courses and maintain an overall cumulative GPA of at least 2.0 in order to remain in and/or graduate from the program. Any student earning a grade of D, W, or F in any eye care technology course must repeat the course and pass with a grade of C or higher. A second earned grade of less than C will result in the student being dismissed from the program. To re-enter into the program, the student must submit a written petition to the eye care technology admission committee, and satisfy the re-admission criteria specified by the committee.

Eye Care Technology (3EYE)

Associate of Applied Science Degree

Central Campus

First Term	Credit
HPRS 1101–Introduction to Health Professions	1
OPTS 1319–Vision Care Office Procedures.....	3
ENGL 1301–Composition I	3
OPTS 1471–Anatomy and Physiology for Vision Care Technology ...	4
HPRS 1106–Medical Terminology	1
OPTS 1311–Visual System.....	3
OPTS 1191–Special Topics In Opticianry/Dispensing Optician	1

16

Third Term	Credit
Specialty Elective.....	4
Approved Specialty Elective	4
DFTG 2386–Internship–Drafting and Design Technology/Technician, General or	
DFTG 2438–Final Project–Advanced Drafting	3

11

Certificate of Technology Total: 35-36

+Capstone Experience: DFTG 2386 or DFTG 2438

+ The course selected to satisfy the Capstone Experience (DFTG 2386 or DFTG 2438) can only be taken during, or after, the term in which the last required and elective engineering design graphics courses are completed.

Certificates in multiple engineering design graphics specialties will not be awarded.

Technical Animator/Modeler Specialty Electives (Choose four)

ARCE 1421	ARTV 1402	ARTV 1440
DFTG 1445	DFTG 2440	DFTG 2447

Approved Specialty Electives (Choose one)

ARCE 1421	ARTV 1402	ARTV 1440
DFTG 1445	DFTG 2406	DFTG 2440
DFTG 2445	DFTG 2447	DFTG 2458

Engineering Design Graphics Foundation (6DFTG)

Occupational Certificate

All Campuses

First Term	Credit
DFTG 1405–Technical Drafting	4
DFTG 1409–Basic Computer-Aided Drafting or DFTG 1410–Specialized Basic Computer Aided Drafting (CAD)	4
DFTG 2417–Descriptive Geometry	4
DFTG 1417–Architectural Drafting–Residential or DFTG 2402–Machine Drafting or DFTG 2423–Pipe Drafting or ARVT 1402–Introduction to Technical Animation and Rendering4	

Occupational Certificate Total: 16

Capstone Experience: DFTG 1417; or DFTG 2402; or DFTG 2423 or ARTV 1402.

This is a new exit point and is being added to capture students exiting the program and going into the drafting industry and is recommended by the Engineering Graphics Advisory Board.

Eye Care Technology

Central Campus

A criminal background check and/or drug screening is required for all health science students attending clinical courses, or practicum; and may be required prior to admission to the program.

Technical Programs

Second Term	Credit
OPTS 1501–Ophthalmic Dispensing.....	5
OPTS 1315–Basic Contact Lens.....	3
OPTS 2441–Ophthalmic Techniques	4
PHED Activity	1
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
	16

PostY1Summer	Clock Hrs
OPTS 1166–Practicum (or Field Experience) - Opticianry/Ophthalmic Dispensing Optician	1
HPRS 1105–Medical Law and Ethics for Health Professionals	1
POFM 1327–Medical Insurance	3
OPTS 2350–Ophthalmic Surgical Techniques.....	3
	8

Third Term	Credit
OPTS 2445–Advanced Ophthalmic Techniques	4
OPTS 1392–Special Topics In Opticianry/Dispensing Optician	3
HPRS 2200–Pharmacology for Health Professions	2
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PHED Activity	3
	15

Fourth Term	Credit
OPTS 2431–Advanced Ophthalmic Dispensing.....	4
OPTS 2266–Practicum (or Field Experience) - Opticianry/Ophthalmic Dispensing Optician	2
*Humanities or Fine Arts	3
Speech	3
PSYC 2301–General Psychology	3
	15

Associate of Applied Science Degree Total **68**

Capstone Experience: OPTS 1166 or OPTS 2266

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Eye Care Technology (4EYE)

Certificate of Technology (Technician)

Central Campus

First Term	Credit
HPRS 1101–Introduction to Health Professions	1
OPTS 1319–Vision Care Office Procedures.....	3
HPRS 2200–Pharmacology for Health Professions	2
OPTS 1311–Visual System.....	3
	9

Second Term	Credit
OPTS 1501–Ophthalmic Dispensing.....	5
OPTS 2441–Ophthalmic Techniques	4
OPTS 1315–Basic Contact Lenses	3
	12

PostY1Summer	Credit
HPRS 1105–Medical Law/Ethics for Health Professionals.....	1
OPTS 1166–Ophthalmic Practicum I	1
	2

Third Term	Credit
OPTS 2431–Advanced Ophthalmic Dispensing.....	4
OPTS 2445–Advanced Ophthalmic Techniques	4
	8

Fourth Term	Credit
OPTS 2266–Ophthalmic Practicum II	2
	2

Certificate of Technology Total **33 Credits**

Capstone Experience: OPTS 2266

Eye Care Technology (6EYE)

Occupational Certificate (Assistant)

First Term	Credit
HPRS 1101–Introduction to Health Professions	1
OPTS 1319–Vision Care Office Procedures.....	3
OPTS 1311–Visual System.....	3
	7

Second Term	Credit
OPTS 1501–Ophthalmic Dispensing.....	5
OPTS 2441–Ophthalmic Techniques	4
	9

PostY1Summer	Credit
OPTS 1166–Ophthalmic Practicum I	1
	1

Occupational Certificate Total **17 Credits**

Capstone Experience: OPTS 1166

Fire Protection Technology

Central Campus

The fire protection technology department of San Jacinto College offers three different educational programs for aspiring firefighters and current firefighters.

Technical Programs

- For aspiring firefighters, the College offers the Firefighter Training Academy. The academy meets and exceeds all state requirements for paid/career firefighters. Students seeking an entry-level firefighter position should begin here. See below for further information regarding the Firefighter Training Academy.
- For academy graduates and current firefighters, the College offers an associate of applied science degree in firefighting. This program provides additional fire-related education and certification opportunities as well as courses in general education.
- For academy graduates and current firefighters who wish to become paramedics, the College offers a paramedic option for the Firefighting Associate of Applied Science.

Students in the fire protection technology program must be potentially eligible to participate in certification examinations for firefighters upon successful completion of the prescribed course work. An applicant who has been convicted of a felony, implicated in substance abuse, or involved in activities considered inappropriate by the Texas Commission on Fire Protection may be ineligible to participate in the certification examination. Such an applicant should contact the Texas Commission on Fire Protection in Austin, Texas, for guidance in petitioning the Commission for a decision of eligibility. A copy of the Commission's statement of eligibility should be submitted to the San Jacinto College fire protection technology chief training officer.

Firefighter Training Academy

Central Campus

The following courses meet and exceed the Texas Commission on Fire Protection's curriculum requirements for Basic Fire Suppression Certification and the Texas Department of State Health Services's curricula requirements for Emergency Medical Technician–Basic certification.

FIRS 1301–Firefighter Certification I.....	3
FIRS 1407–Firefighter Certification II.....	4
FIRS 1313–Firefighter Certification III.....	3
FIRS 1319–Firefighter Certification IV.....	3
FIRS 1423–Firefighter Certification V.....	4
FIRS 1329–Firefighter Certification VI.....	3
FIRS 1433–Firefighter Certification VII.....	4
EMSP 1501–Emergency Medical Technician.....	5
EMSP 1160–Clinical EMT–Basic.....	1
PHED Activity.....	1
PHED Activity.....	1

Firefighter Training Academy Total **32**

Academy Information

- New academy classes begin each Summer and Fall semester. Please contact the fire protection technology office for specific schedules and registration information. It is suggested that students contact the fire protection technology office a term in advance of anticipated enrollment, as classes fill up quickly.

- Firefighter Training Academy cadets must undergo a medical examination and physical performance test as defined in NFPA 1582, and submit approval documentation to the department's chief training officer. Students not completing, or failing, the medical examination or the physical performance test are not eligible to continue in the academy and will be withdrawn. Students failing the medical examination or the physical performance test will be eligible for a 100 percent refund in accordance with the current refund policy if officially withdrawn in the registrar's office on or before the 12th class day.
- Firefighter Training Academy students must earn a grade of 70 or better on the academy exams in order to graduate from the academy. Failure to earn a grade of 70 or better on any exam will result in the student being administratively withdrawn from all Firefighter Training Academy courses. Please see course syllabus for details.
- Each Firefighter Training Academy cadet must satisfactorily demonstrate each of the required performance skills in the curriculum manual of the Texas Fire Commission on Fire Protection in order to graduate from the Basic Fire Academy.
- Student-initiated withdrawals from the required physical education courses, or instructor-initiated withdrawals due to excessive absences, shall result in administrative withdrawal from the Firefighter Training Academy.
- In order to complete the Firefighter Training Academy, the student must earn a grade of C or above in each of the required physical education co-requisites. Failure to earn a grade of C or above in each of the required physical education co-requisites shall result in administrative withdrawal from the Firefighter Training Academy.
- Administrative withdrawal from any San Jacinto College course due to disciplinary action shall result in administrative withdrawal from the Firefighter Training Academy.

Certification Information

San Jacinto College fire protection courses fulfill the educational requirements for numerous fire service certifications. Please contact the fire protection technology department on the Central campus for specific information.

Technical Programs

Firefighting (3FIRE-PROT)

Associate of Applied Science Degree

Central Campus

Persons who are currently certified by the Texas Commission on Fire Protection may enter the program with special permission from the department chair. Under this provision, Firefighter–Basic Certification is accepted in lieu of completion of the following Fire Protection courses:

FIRS 1301	FIRS 1313	FIRS 1319	FIRS 1329
FIRS 1407	FIRS 1423	FIRS 143	

Persons who are currently certified as Emergency Medical Technician–Basic by the Texas Department of State Health Services may enter the program with special permission from the department chair. Under this provision, Texas Department of State Health Services certification is accepted in lieu of completion of the Emergency Medical Technician–Basic courses specified in the program (EMSP 1501 and EMSP 1160).

Prospective students must satisfy the general admission requirements of the College and provide satisfactory evidence of basic firefighter certification to the fire protection technology department chair and the registrar.

First Term	Credit
FIRS 1301–Firefighter Certification I.....	3
FIRS 1407–Firefighter Certification II.....	4
FIRS 1313–Firefighter Certification III.....	3
FIRS 1423–Firefighter Certification V.....	4
PHED Activity	1
	15
Second Term	Credit
FIRS 1319–Firefighter Certification IV.....	3
FIRS 1329–Firefighter Certification VI.....	3
FIRS 1433–Firefighter Certification VII.....	4
EMSP 1501–Emergency Medical Technician	5
EMSP 1160–Clinical - Emergency Medical Technician - Basic.....	1
	16
Third Term	Credit
ENGL 1301–Composition I	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
*Humanities or Fine Arts	3
*Behavioral or Social Science	3
FIRT 1327–Building Construction for the Fire Service.....	3
Approved Elective	3
	18

Fourth Term	Credit
ENGL 2311–Technical Report Writing.....	3
Speech	3
FIRT 2305–Fire Instructor I.....	3
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
Approved Elective	3

15

PostY2Summer	Credit
FIRT 1319–Firefighter Health and Safety.....	3
Approved Elective	3

6

Associate of Applied Science Degree Total 71

Capstone Experience: Texas Commission on Fire Protection–Basic Fire Suppression and Texas Department of State Health Services Emergency Medical Technology–Basic

**Courses that satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.*

Approved Electives		
FIRT 1303	FIRT 1309	FIRT 1349
FIRT 1370	FIRT 1408	FIRT 1440
FIRT 2333	FIRT 2351	

Firefighting (4FIREFTG)

Certificate of Technology

Central Campus

First Term	Credit
FIRS 1301–Firefighter Certification I.....	3
FIRS 1407–Firefighter Certification II.....	4
FIRS 1313–Firefighter Certification III.....	3
FIRS 1319–Firefighter Certification IV.....	3
FIRS 1423–Firefighter Certification V.....	4
FIRS 1329–Firefighter Certification VI.....	3
FIRS 1433–Firefighter Certification VII.....	4
EMSP 1501–Emergency Medical Technician	5
EMSP 1160–Clinical–EMT–Basic	1
PHED 1119–PHED Activity.....	1
PHED 1119–PHED Activity.....	1

Certificate of Technology Total 32

Capstone Experience: Texas Commission on Fire Protection–Basic Fire Suppression and Texas Department of State Health Services Emergency Medical Technology–Basic.

Technical Programs

Firefighting Paramedic (3FIRE-PMD)

Associate of Applied Science Degree

Central Campus

First Term	Credit
FIRT 1327–Building Construction in the Fire Service	3
FIRT 2305–Fire Instructor I.....	3
ENGL 1301–Composition I	3
FIRT Approved Elective.....	3
FIRT Approved Elective.....	3
Physical Education.....	1
	16

Second Term	Credit
FIRT Approved Elective.....	3
FIRT Approved Elective.....	3
Physical Education.....	1
ENGL 2311–Technical Report Writing.....	3
*VNSG 1320–Anatomy and Physiology for Allied Health.....	3
	13

Third Term	Credit
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
**Humanities or Fine Arts.....	3
**Behavioral or Social Sciences	3
EMSP 2348–Emergency Pharmacology.....	3
EMSP 2444–Cardiology	4
EMSP 2161–Clinical–Emergency Medical Technology–Paramedic I. 1	1
	17

Fourth Term	Credit
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
Speech	3
EMSP 2434–Medical Emergencies.....	4
EMSP 2330–Special Populations.....	3
EMSP 2162–Clinical–Emergency Medical Technology–Paramedic II 1	1
	14

PostY2Summer	Credit
EMSP 2338–EMS Operations.....	3
EMSP 2243–Assessment Based Management.....	2
EMSP 2168–Practicum/Field Experience–Emergency Medical Technology–Paramedic.....	1
	6

Associate of Applied Science Degree Total **66**

Capstone Experience: Texas Commission on Fire Protection–Basic Fire Suppression and Texas Department of State Health Services Emergency Medical Technology–Basic

* Important information concerning this class can be found in the emergency medical technology section of the Catalog.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives		
FIRT 1370	FIRT 2370	FIRT 1309
FIRT 1349	FIRT 2351	FIRT 1303
FIRT 2333	FIRT 1408	FIRT 1440
FIRT 1338	FIRT 2309	FIRT 2331
FIRT 1315	FIRT 1345	FIRT 2345
FIRT 1319		

Health Information Management

Health Information Management (3HITT-INF)

Associate of Applied Science Degree

North Campus

The associate degree program is designed to train health information management personnel to perform a variety of technical functions including organizing, analyzing, coding, and technically evaluating health information. Health information technicians work to ensure that complete and accurate records are kept for each patient in a health care facility. The program is accredited by the Commission on Accreditation for Health Information and Information Management (CA-HIIM) in cooperation with the Council on Accreditation of the American Health Information Management Association. Students are eligible to apply to write the national exam for the RHIT after completion of the A.A.S. degree.

Prerequisite	Credit
*ITSC1309–Integrated Software Application I.....	3
	3

Technical Programs

Technical Programs

First Term	Credit
*HITT 1305–Medical Terminology	3
PHED Elective	1
*HITT 1355–Health Care Statistics	3
*HITT 1301–Health Data Content and Structure	3
Speech	3
*ENGL 1301–Composition I.....	3
	16

Second Term	Credit
*HITT 1374–Anatomy and Physiology	3
*HPRS 2301–Pathophysiology.....	3
*HITT 1345–Health Care Delivery Systems.....	3
*HITT 1341–Coding and Classification Systems	3
*ENGL 2311–Technical Report Writing	3
	15

PostY1Summer	Credit
*HITT 1353–Legal/Ethical Aspects of Health Information.....	3
**Humanities or Fine Arts.....	3
	6

Third Term	Credit
PSYC 2301–General Psychology	3
*HITT 2360–Clinical I	3
HITT 2335–Coding and Reimbursement Methodologies	3
*HITT 2346–Advanced Medical Coding	3
Math or Science Elective.....	3
	15

Fourth Term	Credit
*HITT 2343–Quality Assessment and Performance Improvement	3
*HITT 2361–Clinical II	3
*HITT 2249–RHIT Competency Review.....	2
*HITT 2339–Health Information Organization and Supervision.....	3
PHED Elective	1
ITSW 2334–Advanced Spreadsheets.....	3
	15

Associate of Applied Science Degree Total 70-71

External Field Experience: HITT 2361

Credential Exam: CTR National Certification Exam

Note: Students must pass each HITT and HPRS course listed in the health information management A.A.S. degrees, and certificate of technology plans with a grade of C to be eligible to receive either the degree or any of the certificates.

*** Note: Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences section of the Transfer Core Curriculum.*

Cancer Data Management Specialty (3HITT-CAN)

Associate of Applied Science Degree

North Campus

First Term	Credit
*ITSC 1309–Integrated Software Applications I	3
*HITT 1305–Medical Terminology	3
*ENGL 1301–Composition I.....	3
Speech.....	3
	12

Second Term	Credit
*HITT 1341–Coding and Classification Systems	3
*ENGL 2311–Technical Report Writing	3
*HPRS 2301–Pathophysiology.....	3
*HITT 1345–Health Care Delivery Systems.....	3
*HITT 1374–Anatomy and Physiology	3
	15

PostY1Summer	Credit
*HITT 1353–Legal and Ethical Aspects of Health Information.....	3
	3

Third Term	Credit
PHED Elective	1
*HITT 1355–Health Care Statistics	3
*HITT 1307–Cancer Data Management I	3
ITSW 2334–Advanced Spreadsheets.....	3
MATH or Science Elective.....	3
	13

Fourth Term	Credit
*HITT 2343–Quality Assessment and Performance Improvement	3
*HITT 2307–Cancer Data Management II	3
*HITT 2339–Health Information Organization and Supervision.....	3
*HITT 2370–Cancer Data Management III	3
PHED Elective	1
*PSYC 2301–General Psychology.....	3
	16

Technical Programs

Medical Billing and Coding (4HITT-MDBC)

Certificate of Technology

North Campus

First Term	Credit
*HITT 1305–Medical Terminology	3
*HPRS 2301–Pathophysiology.....	3
MDCA 1343–Medical Insurance	3
*HITT 1301–Health Data Content	3
	12

Second Term	Credit
*HITT 1341–Coding and Classification Systems	3
*HITT 2346–Advanced Medical Coding	3
HITT 1370–Advanced Medical Insurance	3
HITT 1353–Legal and Ethical Aspects of Health Information	3
	12

Third Term	Credit
HITT 1377–Clinical - Medical Billing	3
	3
Certificate of Technology Total	26

External Field Experience: HITT 1260

Note: Students must pass each HITT and HPRS course listed in all health information management A.A.S. degrees, and certificate of technology plans with a grade of C to be eligible to receive either the degree or any of the certificates.

Medical Coding (4HITT-MDC)

Certificate of Technology

North Campus

First Term	Credit
*HITT 1305–Medical Terminology	3
*HITT 1301–Health Data Content and Structure	3
*HITT 1374–Anatomy and Physiology	3
*HPRS 2301–Pathophysiology.....	3
*HITT 1341–Coding and Classification Systems	3
	15

Second Term	Credit
*HITT 1345–Health Care Delivery Systems.....	3
*ITSC 1309–Integrated Software Apps	3
HITT 2335–Coding and Reimbursement Methodologies	3
*HITT 1353–Legal and Ethical Aspects of Health Information.....	3
*HITT 2346–Advanced Medical Coding	3
	15

PostY2Summer	Credit
*HITT 1361–Clinical-Health Information/Medical Records Technology/ Technician	3
	3
Associate of Applied Science Degree Total	65

External Field Experience: HITT 1361

Credential Exam: CTR National Certification Exam

Note: This is a new exit point recommended by advisory committee to address the CTR National Certification.

Note: Students must pass each HITT and HPRS course listed in the health information management A.A.S. degrees, and certificate of technology plans with a grade of C to be eligible to receive either the degree or any of the certificates.

***Note: Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences section of the Transfer Core Curriculum.*

Cancer Data Management (4HITT-CAN)

Certificate of Technology

North Campus

First Term	Credit
*HITT 1307–Cancer Data Management I.....	3
*HITT 1301–Health Data Content and Structure	3
*HITT 1305–Medical Terminology	3
*HPRS 2301–Pathophysiology.....	3
	12

Second Term	Credit
*HITT 1374–Anatomy and Physiology	3
*HITT 2307–Cancer Data Management II	3
*HITT 2370–Cancer Data Management III	3
	9

Third Term	Credit
*HITT 1361–Clinical.....	3
	3
Occupational Certificate Total	24

External Field Experience: HITT 1361

Note: Students must pass each HITT and HPRS course listed in the health information management A.A.S. degrees, certificate of technology, and occupational certificate plans with a grade of C to be eligible to receive either the degree or any of the certificates.

Technical Programs

PostY1 Summer	Credit
*HITT 2245—Coding Certification Exam Review	2
HITT 1360—Clinical—Health Information/Medical Records Technology/Technician	3
	5
Certificate of Technology Total	35

Capstone Experience: HITT 1360

Note: Students must pass each HITT and HPRS course listed in the health information management A.A.S. degrees, and certificate of technology plans with a grade of C to be eligible to receive either the degree or any of the certificates.

Courses indicated by () are also offered via distance learning (Internet).*

Instrumentation Technology

Instrumentation Technology (3INST)

Associate of Applied Science Degree

Central Campus

Instrumentation technology training at San Jacinto College falls into three categories: instrumentation installation, general instrument maintenance, and control systems technology. Our program is designed so that a student can achieve success in all three of these areas.

Instrumentation technology is arguably the most technologically challenging field in industry today. Highly-trained instrument technicians, also known as control systems technologists, are responsible for installing, calibrating, and troubleshooting individual process instruments, as well as complete control systems. They are expected to understand the workings of a process, as well as the complexity of the control system.

Computer control in the processing industry provides a platform for more sophisticated control strategies, and requires connecting intelligent devices together through various networking systems and protocols. Therefore, today's control systems technologist must be able to navigate among various intelligent devices and implement sophisticated control strategies if they are to be successful in troubleshooting control system problems. Our program addresses these issues in one of the most comprehensive industrial computer control labs in the country.

Key facilities of the instrumentation technology program at San Jacinto College include a fully-equipped pneumatic control lab and an analog electronic lab control. We also have a 10-station SLC 5/03 Programmable Logic Controller (PLC) lab and a 10-station Emerson Process Management DeltaV Distributed Control System (DCS) lab with 10 fully-operational flowing process instrumented stations. In addition, we have access to a full-sized functioning distillation (ethylene glycol and water separation) unit to explore maintenance issues and control strategies.

The College recently started a new day program in which a student can complete all of the classes necessary to earn a certificate of technology in two semesters.

Our primary focus is in providing the local processing industry with good, trainable entry-level technicians. However, our students will have the latitude of working in other related areas such as oil exploration and production, and municipal water treatment facilities for cross-country pipeline companies, and electrical powerplants, and in manufacturer field technician positions.

First Term

	Credit
INTC 1312—Introduction to Instrumentation and Safety	3
INTC 1301—Principles of Industrial Measurement I	3
ELPT 1311—Basic Electrical Theory	3
ENGL 1301—English Composition I	3
*MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3
PHED Activity	1
	16

Second Term

	Credit
INTC 1315—Final Control Elements.....	3
INTC 1322—Analog Electronic Instrumentation I.....	3
INTC 2310—Principles of Industrial Measurements II.....	3
ENGL 2311—Technical Report Writing.....	3
**Behavioral or Social Science	3
PHED Activity	1
	16

Third Term

	Credit
INTC 1341—Principles of Automatic Control	3
INTC 1350—Digital Measurement Controls.....	3
INTC 1353—Analog Electronic Instrumentation II.....	3
INTC 1355—Unit Operations.....	3
Approved Elective	3
Speech	3
	18

Fourth Term

	Credit
INTC 2359—Distributive Control Systems.....	3
ELPT 2319—Programmable Logic Controllers I	3
INTC 1348—Analytical Instrumentation	3
INTC 2330—Troubleshooting	3
INTC 2333—Instrumentation and Installation.....	3
**Humanities or Fine Arts	3
	18

Associate of Applied Science Degree Total

Capstone Experience: INTC 2359

* Students desiring to obtain a baccalaureate degree should take Math 1314—College Algebra.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives

INTC 2339	INTC 2388
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Technical Programs

Interior Design

Interior Design (3INT-DSGN)

Associate of Applied Science Degree

Central Campus

This program is designed to develop students' ability to identify, research, and creatively solve problems relative to interior spaces, including programming, design analysis, and space planning. The students will work with commercial and residential interiors, prepare presentations, and learn business procedures used by interior designers.

Training includes six terms of study in interior design and related courses. However, a student may file for an associate of applied science degree after successful completion of the first two years of the program. Students may continue their study to complete 18 term hours in the third year of the program and receive a certificate of technology, the professional credential to enter the profession of interior design as a beginning professional. The curriculum provides a balance of technical, creative, and business training necessary for a career in interior design. An applicant for interior design registration by examination, who begins their education after Sept. 1, 2006, must graduate from a program approved by FIDER.

First Term	Credit
INDS 1411–Fundamentals of Interior Design.....	4
INDS 1451–History of Interiors I.....	4
INDS 2407–Textiles for Interior Design.....	4
DFTG 1413–Drafting for Specific Occupations	4
PHED Activity	1
	17

Second Term	Credit
INDS 1449–Fundamentals of Space Planning	4
INDS 1452–History of Interiors II	4
INDS 2421–Presentation Drawing.....	4
DFTG 1417–Architectural Drafting–Residential	4
PHED Activity	1
	17

PostY1Summer	Credit
*Humanities or Fine Arts	3
	3

Third Term	Credit
INDS 1415–Materials, Methods and Estimating.....	4
INDS 2413–Residential Design I.....	4
INDS 1445–Commercial Design I.....	4
ENGL 1301–Composition I	3
MATH 1333–Contemporary Mathematics or MATH 1314 College Algebra	3
	18

Instrumentation Technology (4INST)

Certificate of Technology

Central Campus

First Term	Credit
INTC 1312–Introduction to Instrumentation and Safety	3
INTC 1301–Principles of Industrial Measurement I.....	3
ELPT 1311–Basic Electrical Theory.....	3
INTC 1315–Final Controls Elements	3
INTC 1322–Analog Controls I.....	3
INTC 1341–Principles of Automatic Control	3
	18

Second Term	Credit
INTC 1350–Digital Measurement and Controls.....	3
INTC 1353–Analog Controls II	3
INTC 2310–Principles of Industrial Measurements II.....	3
INTC 2359–Distributive Control Systems.....	3
ELPT 2319–Programmable Logic Controllers I	3
INTC 2333–Instrumentation and Installation.....	3
	18

Certificate of Technology Total **36**

Capstone Experience: INTC 2359

Instrumentation Analyzer Marketable Skills Achievement Award (MINST)

Central Campus

First Term	Credit
SCIT 1414–Applied General Chemistry I.....	4
INTC 1375–Sample Systems.....	3
INTC 1348–Analytical Instrumentation	3
	10
Marketable Skills Achievement Award Total	10

Instrumentation Technology

Certificate of Technology

Continuing Education

Central Campus

	Contact Hours
INTC 1001–Principles of Industrial Measurement.....	112
INTC 1003–Introduction to Instrumentation.....	128
INTC 1043–Application of Industrial Automatic Controls.....	90
INTC 1071–Mounted Instruments	75
INTC 1056–Instrumentation Calibration.....	75
INTC 2031–Instrumentation Trouble Shooting	78
Certificate of Technology Total	558

Capstone Experience: INTC 2031

Technical Programs

Fourth Term	Credit
INDS 2435–Residential Design II.....	4
INDS 2425–Professional Practices for Interior Designers.....	4
INDS 2386–Internship–Interior Design.....	3
*Behavioral or Social Science.....	3
SPCH 1315 or SPCH 1321.....	3
	17
Associate of Applied Science Degree Total	17

Capstone Experience: INDS 2386

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Interior Design (4INTD-DSGN)

Certificate of Technology

Central Campus

First Term	Credit
INDS 1411–Fundamentals of Interior Design.....	4
INDS 1451–History of Interiors I.....	4
INDS 2407–Textiles for Interior Design.....	4
DFTG 1413–Drafting for Specific Occupations or DFTG 1417–Architectural Drafting–Residential.....	4
	16

Second Term	Credit
INDS 1449–Fundamentals of Space Planning.....	4
INDS 1452–History of Interiors II.....	4
INDS 1415–Materials, Methods, and Estimating.....	4
	12

Third Term	Credit
INDS 2421–Presentation Drawing.....	4
INDS 2413–Residential Design I.....	4
INDS 2425–Professional Practices for Interior Design.....	4
	12

Certificate of Technology Total **40**

Capstone Experience: INDS 2413

Interior Design (4INTD-PRO)

Professional Credential in Interior Design

Central Campus

The following courses are required for a second certificate of technology titled The Professional Credential in Interior Design.

Fifth Term	Credit
DFTG 2428–Architectural Drafting–Commercial.....	4
INDS 2431–Commercial Design II.....	4
	8

Sixth Term	Credit
INDS 2387–Internship–Interior Design.....	3
Engineering Design Graphics.....	4
FMLD 1372–Dynamics of Human Relationships.....	3
	10

Professional Credential Total **18**

Capstone Experience: INDS 2431

International Business and Logistics

The international business and logistics program is designed to prepare students for careers in the international trade community. Graduates will work as specialists in importing and exporting, administrative service managers, sales supervisors, wholesale and retail buyers, purchasing agents, importing and exporting trade compliance officers, transportation supervisors and wholesale representatives. Students successfully completing the program will develop a strong background in import and export management processes, governmental controls, licensing of products, import and export documentation, customs regulations, and political-legal factors in the foreign trade environment. Topics also include international purchasing and sourcing; international marketing strategies; international monetary systems and financial institutions; international and domestic transportation; cross-cultural management and communication processes and cultural geographic distinctions that affect individual, group, and organizational behavior.

International Business and Logistics (3INTL-LOG)

Associate of Applied Science Degree

North Campus

First Term	Credit
IBUS 1305–Introduction to International Business and Trade.....	3
IBUS 1301–Principles of Exports.....	3
IBUS 1341–Global Supply Chain Management.....	3
IBUS 1302–Principles of Imports.....	3
IBUS 2345–Import Customs Regulations.....	3
	15

Technical Programs

Second Term	Credit
IBUS 2366–Field Experience– International Business/Trade/Commerce.....	3
HMSY 1337–Introduction to Homeland Security.....	3
IBUS 1300–Global Logistics Management.....	3
IBUS 1354–International Marketing Management.....	3
SPCH 1321–Business and Professional Speech.....	3
	15

Pre-requisite	Credit
IBUS 2367–Field Experience–Practicum.....	3
	3

Third Term	Credit
MATH 1333–Contemporary Mathematics or MATH 1314–college Algebra.....	3
ENGL 1301–Composition I.....	3
SOCI 1301–Introduction to Sociology.....	3
BCIS 1305–Business Computer Applications.....	3
Foreign Language.....	3
PHED Activity.....	1
	16

Fourth Term	Credit
ACNT 1303–Introduction to Accounting I or ACCT 2301–Accounting Principles I.....	3
ENGL 1302–Composition II.....	3
PHED Activity.....	1
*Humanities or Fine Arts.....	3
HRPO 1311–Human Relations.....	3
	13

Associate of Applied Science Degree Total **63**

External Work Experience: IBUS 2367

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the transfer Core Curriculum.

International Business and Logistics (4INTL-LOG)

Certificate of Technology

North Campus

First Term	Credit
IBUS 1305–Introduction to International Business and Trade.....	3
IBUS 1301–Principles of Exports.....	3
IBUS 1341–Global Supply Chain Management.....	3
IBUS 1302–Principles of Imports.....	3
IBUS 2345–Import Customs Regulations.....	3
	15

Second Term	Credit
IBUS 2366–Field Experience– International Business/Trade/Commerce.....	3
HMSY 1337–Introduction to Homeland Security.....	3
IBUS 1354–International Marketing Management.....	3
IBUS 1300–Global Logistics Management.....	3
	12

Post-Year 1 Summer Session

Credit	Credit
IBUS 2367–Practicum (or Field Experience) - International Business/Trade/Commerce.....	3
	3

Certificate of Technology Total **30**

External Learning Experience: IBUS 2367

International Business and Logistics (6INTL-LOG)

Occupational Certificate

North Campus

First Term	Credit
IBUS 1301–Principles of Exports.....	3
IBUS 1302–Principles of Imports.....	3
IBUS 1305–Introduction to International Business and Trade.....	3
IBUS 1341–Global Supply Chain Management.....	3
IBUS 2345–Import Customs Regulations.....	3
	15

Second Term

Credit	Credit
IBUS 2366–Practicum (or Field Experience) - International Business/Trade/Commerce.....	3
	3

Occupational Certificate Total **18**

Capstone Course: IBUS 2366

International Business Maritime and Logistics Specialty (3INTL-MAR)

Associate of Applied Science Degree

North Campus

First Term	Credit
MART 1471–Introduction to Ships and Shipping.....	4
IBUS 1301–Principles of Exports.....	3
IBUS 1302–Principles of Imports.....	3
LMGT 1319–Introduction to Business Logistics.....	3
LMGT 1345–Economics of Transportation and Distribution.....	3
	16

Technical Programs

Second Term	Credit
HMSY 1337—Introduction to Homeland Security.....	3
IBUS 1300—Global Logistics Management.....	3
IBUS 1341—Global Supply Chain Management.....	3
LMGT 1325—Warehouse and Distribution Center Management.....	3
	12

PostY1Summer	Credit
IBUS 2345—Import Customs Regulations.....	3
IBUS 2367—Practicum (or Field Experience) - International Business/Trade/Commerce.....	3
	6

Third Term	Credit
*Math 1333—Contemporary Mathematics for Technical Programs or MATH 1314—College Algebra or higher.....	3
ENGL 1301—Composition I.....	3
SOCI 1301—Introduction to Sociology.....	3
BCIS 1305—Business Computer Applications.....	3
SPAN 1411—Beginning Spanish I or another Foreign Language.....	4
Physical Education.....	1
	17

Fourth Term	Credit
ACNT 1303—Introduction to Accounting I or ACCT 2301—Accounting Principles I.....	3
ENGL 1302—English Composition II.....	3
SPCH 1321—Business and Professional Speech.....	3
Physical Education.....	1
**Humanities/FA-Vis/Perf Arts.....	3
	13
Associate of Applied Science Degree Total	64

External Field Experience: IBUS 2367

* Students desiring to obtain a baccalaureate degree should take Math 1314-College Algebra.

** Courses which satisfy this requirement are listed in Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Maritime and Logistics Specialty (4INTL-MAR)

Certificate of Technology

North Campus

First Term	Credit
MART 1471—Introduction to Ships and Shipping.....	4
IBUS 1301—Principles of Exports.....	3
IBUS 1302—Principles of Imports.....	3
LMGT 1319—Introduction to Business Logistics.....	3
LMGT 1345—Economics of Transportation and Distribution.....	3
	16

Second Term	Credit
HMSY 1337—Introduction to Homeland Security.....	3
IBUS 1300—Global Logistics Management.....	3
IBUS 1341—Global Supply Chain Management.....	3
LMGT 1325—Warehouse and Distribution Center Management.....	3
	12

PostY1Summer	Credit
IBUS 2345—Import Customs Regulations.....	3
IBUS 2367—Practicum (or Field Experience) - International Business/Trade/Commerce.....	3
	6

Certificate of Technology Total

34

External Field Experience: IBUS 2367

Maritime and Logistics Specialty (6INTL-MAR)

Occupational Certificate

North Campus

First Term	Credit
MART 1471—Introduction to Ships and Shipping.....	4
IBUS 1301—Principles of Exports.....	3
IBUS 1302—Principles of Imports.....	3
LMGT 1319—Introduction to Business Logistics.....	3
LMGT 1345—Economics of Transportation and Distribution.....	3
	16

Occupational Certificate Total

16

Capston Experience: LMGT 1345

Law Enforcement

See Criminal Justice

Legal Assistant

See Paralegal

Long Term Care Administration

Long Term Care Administration (4LTRM-CARE)

Certificate of Technology

Central Campus

First Term	Credit
LTCA 1312–Resident Care in the Long Term Care Facility.....	3
LTCA 2314–Long Term Care Law	3
LTCA 2488–Internship-Health Care Facilities.....	4
	10
Second Term	Credit
LTCA 1313–Organization and Management of Long Term Care Facilities.....	3
LTCA 2315–Financial Management of Long Term Care Facilities	3
LTCA 2489–Internship - Hospital and Health Care Facilities Administration/Management.....	4
HRPO 1311–Human Relations.....	3
	13
Third Term	Credit
LTCA 2388–Internship - Hospital and Health Care Facilities Administration/Management.....	3
	3
Certificate of Technology Total	26

Management Development

See *Business Management*

Massage Therapy

See *Cosmetology*

Technical Programs

Medical Assisting

Medical Assisting (4MED-ASST)

Certificate of Technology

North Campus

The medical assisting program is designed to train medical assistant personnel to perform both administrative and clinical duties and to report directly to an office manager, physician, or other health practitioner. Administrative duties may include answering telephones, greeting patients, updating and filing patient medical records, filling out insurance forms, scheduling appointments, handling billing and bookkeeping. Clinical duties vary according to state law and may include taking medical histories and recording vital signs, explaining treatment procedures to patients, preparing patients for examination, and assisting physicians during examination. The program is accredited by the Commission on Accreditation of Allied Health Education Programs (CAAHEP) in cooperation with the American Association of Medical Assistant Endowment. Students are eligible to apply to write the national exam for the CMA after completion of the medical assisting certificate of technology.

First Term	Credit
HITT 1374–Anatomy and Physiology.....	3
HITT 1305–Medical Terminology.....	3
HPRS 2301–Pathophysiology.....	3
MDCA 1421–Administrative Procedures.....	4
MDCA 1343–Medical Insurance	3
	16
Second Term	Credit
HITT 1353–Legal and Ethical Aspects of Health Information.....	3
BUSI 1304–Business Report Writing and Correspondence.....	3
MDCA 1348–Pharmacology and Administration of Medications.....	3
MDCA 1371–Medical Assistant Interpersonal and Communication Skills	3
MDCA 1417–Procedures in a Clinical Setting	4
	16
Third Term	Credit
MDCA 1254–Certified Medical Assistant Exam Review.....	2
MDCA 1560–Clinical.....	5
	7
Certificate of Technology Total	39
External Experience: MDCA 1560	

Note: Students must pass each course listed in the certificate for medical assistant with a grade of C or higher to be eligible to receive a certificate of technology.

Technical Programs

Medical Imaging Technology

Central Campus

A criminal background check and/or drug screening is required of all health science students attending clinical courses, or practicum, and may be required prior to admission to the program.

The purpose of the medical imaging department is to educate and train students for entry level employment in radiography, computed tomography and magnetic resonance imaging.

Upon graduation the student will:

- be proficient in areas of patient care, aseptic technique, and infection control;
- demonstrate communication skills, employ medical ethics, and show an understanding of medicolegal issues;
- properly operate radiographic equipment to produce images of diagnostic quality;
- demonstrate proper radiation protection skills;
- evaluate images or radiographs for diagnostic quality;
- locate pertinent anatomy and pathology on images or radiographs;
- perform standard radiographic positions and projections leading to completion of radiographic examinations;
- use reasoning and judgment to adapt the standard methods of radiographic exams upon evaluation of patient condition; and,
- be familiar with special radiographic procedures and other types of medical imaging to include sonography, magnetic resonance imaging, mammography, and computed tomography, as well as explain the general indications for use of each.

The program is accredited by the Joint Review Committee on Education in Radiologic Technology. Upon completion of the program the student is granted an associate of applied science degree and is eligible to apply for the certification examination given by the American Registry of Radiologic Technologists (ARRT) in diagnostic medical radiography.

The program curriculum is a balance of general educational and technical courses, as well as supervised clinical practicum work at local hospitals. This combination provides the student an opportunity for educational development and skill competency during the 24-month program.

Prior to entering the radiography program, students may take any of the general liberal arts courses required in the program. Medical radiography students must earn a grade of C or above in each medical radiography (RADR) course and maintain an overall grade point average of at least 2.0 in order to graduate from the medical radiography program.

If a student earns a grade of D, W, or F in a medical imaging (RADR) course, the student will not be permitted to continue or to graduate from the program until that course has been repeated and a grade of C or above has been earned. The student may appeal to the medical imaging appeals committee to be admitted back into the program after a “3 Strikes” suspension.

Students who do not enroll in the medical radiography program for one or more semesters after beginning the program must make written petition to the medical imaging department chair for re-entry into the program.

Because clinical space is limited, students are admitted on a competitive basis. Those seeking admission should first apply to San Jacinto College and gain acceptance to the College. The medical radiography program holds pre-enrollment meetings throughout the year for those interested in the program. For dates and times of these pre-enrollment meetings, call the medical imaging department at 281.476.1871. Attendance at a pre-enrollment meeting is required to be able to apply to the program. Program admission criteria and the selection process are explained at the pre-enrollment information meeting.

Program Admission Criteria

Applicants must meet the College’s general admission requirements, as well as the program admission criteria. After acceptance into the program, an applicant must have a physical examination by a licensed physician (M.D., D.O.) and an orientation with a member of the department of medical imaging.

Students who apply for admission to the medical radiography program will be selected on the basis of their highest ACT/SAT test scores or their highest grade point average at San Jacinto College, dependent upon the option under which they apply (Option A or Option B). In the case of a tie, the student with the most coursework completed will be selected for admission.

Option A: An SAT score of 680 or above on a test taken prior to April 1995 or a score of 810 or above on an SAT taken on or after April 1, 1995; or an ACT composite score of 18 or above (ACT composite score of 15 or above if taken before October 1989).

Option B: Applicants must complete a minimum of nine semester hours from San Jacinto College as specified below with no grade lower than C. MATH 1314 or MATH 1333 must be taken as part of this nine hour requirement and the other six may come from courses as stated below.

- ITSC 1309, Speech, ENGL 1301 Humanities/Visual or Performing Arts

Technical Programs

Applicants seeking admission by Option B may petition the admission coordinator to take a more advanced mathematics or English course if they have completed the above stated courses with a grade of C or above at another accredited institution.

Students must apply for admission to the department of medical imaging by submitting an application and all required official documents to the Office of Enrollment Services at San Jacinto College Central. All documents must be received by the end of the application dates listed below.

Application Periods: April 1 through June 1, for Fall admission; and Sept. 1 through Nov. 1, for Spring admission. Students seeking admission to the medical imaging program who have previously earned more than one grade of D or F in another institution's medical imaging program may not be eligible for admission.

Applicants to the medical radiography program will be notified by mail regarding their acceptance. Applicants who are not selected for admission to the medical radiography program must re-apply to be considered in the future. Applicants who are accepted for admission into the medical radiography program, but who do not enroll, must also re-apply.

Medical Radiography (3MED-RAD)

Associate of Applied Science Degree

First Term	Credit
RADR 1260—Clinical—Medical Radiologic Technology I.....	2
RADR 1309—Introduction to Radiography and Patient Care.....	3
RADR 1313—Principles of Radiographic Imaging I.....	3
RADR 1317—Radiographic Anatomy and Physiology I.....	3
RADR 1411—Basic Radiographic Procedures.....	4
PHED Activity.....	1
	16

Second Term	Credit
RADR 1360—Clinical Medical Radiologic Technology II.....	3
RADR 1318—Radiographic Anatomy and Physiology II.....	3
RADR 2305—Principles of Radiographic Imaging II.....	3
RADR 2401—Intermediate Radiographic Procedures.....	4
MATH 1333—Contemporary Mathematics or MATH 1314 College Algebra.....	3
	16

PostY1Summer	Credit
RADR 2360—Clinical Medical Radiologic Technology III.....	3
RADR 2309—Radiographic Imaging Equipment.....	3
	6

Third Term	Credit
RADR 2333—Advanced Medical Imaging.....	3
RADR 2361—Clinical Medical Radiologic Technology IV.....	3
PSYC 2301—General Psychology.....	3
ENGL 1301—Composition I.....	3
Speech.....	3
	15

Fourth Term	Credit
RADR 2213—Radiation Biologic Effects and Protection.....	2
RADR 2362—Clinical Medical Radiologic Technology V.....	3
*Humanities or Fine Arts.....	3
IBCIS 1305—Business Computer Applications or ITSC 1309—Integrated Software Applications I.....	3
PHED Activity.....	1
	12

PostY2Summer	Credit
RADR 2335—Radiologic Technology Seminar.....	3
RADR 2117—Radiographic Pathology.....	1
RADR 2363—Clinical Medical Radiologic Technology.....	3
	7

Associate of Applied Science Degree Total **72**

Capstone Experience: ARRT Examination

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Occupational certificate admission criteria: Certification in medical radiography by ARRT or eligible for pending examination. Documents must be presented to the Department of Medical Imaging chair at the time of application.

Diagnostic Medical Sonography (3MED-SONO)

Associate of Applied Science Degree

Central Campus

A medical sonographer is a person qualified to provide patient imaging using ultrasound under the supervision of a medical doctor. The diagnostic medical sonography program prepares students to work in entry-level positions in hospitals and other health care facilities. Upon completion of the curriculum, the student is eligible to apply to take exams for the American Registry of Diagnostic Medical Sonographers (ARDMS) and/or American Registry of Radiologic Technologist (ARRT).

Technical Programs

Admission Criteria:

Bachelor's degree or a two year allied health education in a patient care related area. All applicants must have completed the prerequisite courses prior to admission.

Prerequisite	Credit
Humanities/FA-Vis/Perf Arts	3
ITSC 1309–Integrated Software Applications I.....	3
Physical Education.....	1
Physical Education.....	1
PSYC 2301–General Psychology	3
ENGL 1301–Composition I	3
MATH 1333–Contemporary Mathematics for Technical Programs or MATH 1314–College Algebra or higher	3
SPCH 1315–Public Speaking or SPCH 1318–Interpersonal Communications.....	3
	20

First Term	Credit
DMSO 1210–Introduction to Sonography	2
DMSO 1260–Clinical 1–Diagnostic Medical Sonography.....	2
DMSO 1302–Basic Ultrasound Physics	3
DMSO 1441–Abdominopelvic Sonography	4
DMSO 2405–Sonography of Ob/Gynecology	4
	15

Second Term	Credit
DMSO 1361–Clinical II–Diagnostic Medical Sonography	3
DMSO 1355–Sonographic Pathophysiology.....	3
DMSO 1342–Intermediate Ultrasound Physics	3
DMSO 2342–Sonography of High Risk Obstetrics.....	3
	12

PostY1Summer	Credit
DMSO 2360–Clinical III–Diagnostic Medical Sonography	3
DMSO 2353–Sonography of Supervicial Structures.....	3
DMSO 2343–Advanced Ultrasound Prin. & Instru.....	3
	9

Third Term	Credit
DMSO 2363–Clinical IV–Diagnostic Medical Sonography	3
DMSO 2345–Advanced Sonography Practices	3
DSVT 1300–Principles of Vascular Technology	3
DMSO 2230–Advanced Ultrasound and Review	2
	11

Associate of Applied Science Degree Total 67

Capstone experience: DMSO 2363

Computed Tomography (6MRADCMPT)

Occupational Certificate

Central Campus

First Term	Credit
RADR 2340–Sectional Anatomy for Medical Imaging.....	3
CTMT 2332–Principles of Computed Tomography	3
CTMT 2336–Computed Tomography Equipment and Methodology	3
CTMT 2360–Clinical 1–Computed Tomography Technology/ Technician	3
CTMT 2361–Clinical 2–Computed Tomography Technology/ Technician.....	3
Occupational Certificate Total	15
Capstone Experience: CTMT 2361	

Magnetic Resonance Imaging (6MRAD-MRI)

Occupational Certificate

Central Campus

First Term	Credit
RADR 2340–Sectional Anatomy for Medical Imaging.....	3
MRIT 2330–Principles of Magnetic Resonance Imaging	3
MRIT 2334–Magnetic Resonance Equipment and Methodology	3
MRIT 2360–Clinical 1–Magnetic Resonance Imaging Technology/Tech.....	3
MRIT 2361–Clinical 2–Magnetic Resonance Imaging Technology/Technician.....	3
Occupational Certificate Total	15
Capstone Experience: MRIT 2361	

Degree Planning for Registered Medical Radiographer (ARRT)

This degree program is provided as a means for registered medical radiographers to earn an associate of applied science degree in medical radiography from San Jacinto College.

Students must be graduates of an American Medical Association and Committee on Allied Health Education and Accreditation (CAHEA) approved program of medical radiography and must be registered by The American Registry of Radiologic Technologists (ARRT). Candidates must present a notarized copy of their current ARRT certificate to the department chair before registering for the required courses.

Technical Programs

In addition to a current certification by The American Registry of Radiologic Technologists (ARRT), the student must complete 28 semester hours of academic course work and 12 semester hours of medical radiography (RADR) course work as specified below in order to be eligible to receive the Associate of Applied Science in Medical Radiography.

MATH 1333—Contemporary Mathematics for Technical Programs

ENGL 1301—Composition I

*Humanities or Fine Arts

PSYC 2301—General Psychology

SPCH—Any three-semester hour speech course

ITSC 1309—Integrated Software Applications I

PHED Activity—two semester hours

RADR 2309—Radiographic Imaging Equipment

RADR 2333—Advanced Medical Imaging

RADR 2213—Radiation Biologic Effects and Protection

All other requirements for the associate of applied science degree must be met as specified in the associate of applied science degree section of this catalog.

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Medical Laboratory Technology

Central Campus

A criminal background check and/or drug screening is required on all health science students attending clinical courses, or practicum, and may be required prior to admission to the program.

The medical laboratory technology program is accredited by the National Accrediting Agency for Clinical Laboratory Sciences (NAACLS), 8410 W. Bryn Mawr Ave., Suite 670, Chicago, Illinois, 60631, 773.714.8880. Upon completion of the program, the student is granted an associate of applied science degree and is eligible to apply for the certification examination given by the Board of Registry of the American Society of Clinical Pathologists and/or the National Certification Agency for Medical Laboratory Personnel.

The program curriculum is a balance of general educational and technical courses, as well as supervised practicum work at area hospitals. This provides the student an opportunity for educational development, as well as skill competency.

Prior to entering the medical laboratory technology program, students may take any of the general liberal arts courses required in the medical laboratory technology program.

Medical laboratory technology students must earn a grade of C or above in each medical laboratory technology course and required science courses, and maintain an overall grade point average of at least 2.0 in order to graduate from the medical laboratory technology program.

If a student earns a grade of D, W, or F in a medical laboratory technology or science course, the student will be required to repeat the course in which the unsatisfactory grade was earned and pass that course with a grade of C or better in order to progress.

Clinical practicum absences must be made up within the term in which they occur.

Because clinical practicum space is limited, students are admitted on a competitive basis. Applicants or those seeking additional information should contact the associate dean or a representative from the department of clinical laboratory science. Applications for admission to the Fall term classes are accepted beginning in January.

Students are required to purchase uniforms and accessories. Each student is responsible for his/her own transportation to the clinical areas. Each student who registers for medical laboratory technology is required to purchase student liability insurance the term he/she starts the clinical laboratory practicum.

Philosophy

The philosophy of the department of clinical laboratory science (CLS) parallels the philosophy of San Jacinto College. Medical laboratory technology is an allied health care field that performs laboratory test procedures and analyses used in the diagnosis, treatment, and prognosis of disease, as well as the maintenance of health. Medical laboratory technicians practice their specialty under the direction of licensed physicians in various settings which include hospitals, private and public health clinics, and industrial laboratories.

The medical laboratory technician must be able to apply the knowledge acquired through academic studies and student labs to the clinical setting so that meaningful test results will be obtained to report to the patient's physician. Graduates of the medical laboratory technology program will be prepared to practice medical laboratory technology in all major areas of the clinical laboratory as contributing members of the health care team.

Program Admission Criteria

Students who apply for admission to the program of medical laboratory technology (MLT) will be selected on the basis of their highest ACT/SAT test scores or their highest grade point average at San Jacinto College, dependent upon the option under which they apply (Option A or Option B following).

Option A: An SAT score of 680 or above on test taken prior to April 1995 or a score of 810 or above on an SAT taken on or after April 1, 1995; or an ACT composite score of 18 or above (ACT composite score of 15 or above if taken before October 1989).

Technical Programs

Option B: Applicants to San Jacinto College must complete 10 semester hours, as specified below, with no grade lower than C.

- BIOL 2401
- ENGL 1301
- MATH 1314 or MATH 1333

Applicants seeking admission by Option B may petition the admission coordinator to take a more advanced biology, mathematics or English course if they have completed the above-stated courses with a grade of C or above at another accredited institution.

Students must apply for admission to the medical laboratory technology program by submitting a formal application and all required official documents to the Office of Enrollment Services.

Applicants to the medical laboratory technology program will be notified by mail regarding their program admission status. Applicants who are not selected for admission to the medical laboratory technology program must re-apply before the next term. Applicants who are accepted for admission to the medical laboratory technology program, but who do not enroll, must re-apply. Applicants must meet the College's general admission requirements as well as the program admission criteria.

After acceptance into the program, an applicant must have a physical examination by a licensed physician (M.D., D.O.) and an orientation with a member of the department of clinical laboratory science.

Students are required to purchase uniforms and accessories.

Medical Laboratory Technology (3MED-LABT)

Associate of Applied Science Degree

Pre-requisite	Credit
BIOL 2402–Human Anatomy and Physiology II	4
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
	7

First Term	Credit
HPRS 1106–Medical Terminology	1
MLAB 1201–Introduction to Clinical Laboratory Science	2
PLAB 1223–Phlebotomy	2
MLAB 1415–Hematology	4
ENGL 1301–Composition I	3
BIOL 2401–Human Anatomy and Physiology I	4
	16

Second Term	Credit
MLAB 1227–Coagulation	2
MLAB 1235–Immunology/Serology	2
MLAB 1311–Urinalysis and Body Fluids	3
MLAB 2434–(Clinical) Microbiology	4
SCIT 1495–Special Topics in Analytical Chemistry	4
	15

PostY1 Summer	Credit
MLAB 2166–Practicum I–Medical Laboratory Technician	1
MLAB 2431–Immunohematology	4
	5

Third Term	Credit
MLAB 1231–Parasitology/Mycology	2
MLAB 2266–Practicum II–Medical Laboratory Technician	2
MLAB 2501–(Clinical) Chemistry	5
ITSC 1309–Integrated Software Applications	3
Speech	3
PHED Activity	1
	16

Fourth Term	Credit
MLAB 2338–Advanced Topics in Medical Laboratory Technician	3
MLAB 2267–Practicum III–Medical Laboratory Technician	2
PSYC 2301–General Psychology	3
**Humanities or Fine Arts	3
PHED Activity	1
	12

Associate of Applied Science Degree Total **71**

Capstone Experience: MLAB 2338

* Students desiring to obtain a baccalaureate degree should take MATH 1314, College Algebra.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Medical Laboratory Technology Clinical Laboratory Assistant (6MED-CLA)

Occupational Certificate

Central Campus

First Term	Credit
SPCH 1318–Interpersonal Communications	3
HPRS 1105–Medical Law/Ethics for Health	1
HPRS 1106–Medical Terminology	1
HPRS 1191–Special Topics in Health Professions.....	1
HPRS 1391–Special Topics in Health Professions.....	3
PLAB 1166–Practicum Phlebotomy	1
PLAB 1223–Phlebotomy	2
VNSG 1420–Anatomy and Physiology for Allied Health	4
Occupational Certificate Total	16
Capstone Experience: HPRS 1191	

Mental Health Services

North Campus

Mental health technician training prepares students to care for mentally impaired or emotionally disturbed individuals following physician instructions and hospital procedures. Potential work opportunities include:

- Aides within inpatient/outpatient psychiatric facilities
- Day treatment centers
- Counseling centers
- Rehabilitation facilities

The mental health services program is designed to train mental health technicians and prepare individuals to meet the requirements for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.). Each program offers a practicum class which allows students to apply classroom skills in a treatment setting.

The Mental Health Technician (Psychiatric Aide/Technician) Certificate of Technology prepares students to work with disturbed individuals following physician instructions and hospital procedures. Psychiatric aides and technicians observe and record patient behavior and present findings to counselors, nurses, and other professional staff. They intervene in crisis situations, actively moderate client behavior, and assist with feeding, moving, dressing patients, personal hygiene, and activities of daily living.

The Substance Abuse Counseling Certificate of Technology prepares individuals to enter the field of human services and provide specialized services to individuals and their families experiencing the effects of substance abuse. Graduates will be able to identify appropriate assessments, diagnosis,

Technical Programs

and treatment of individuals who are, or have been, engaged in substance abuse. The program, plus 4,000 hours of work experience, provides individuals with the necessary educational and employment requirements to become eligible for testing as a Licensed Chemical Dependency Counselor (L.C.D.C.).

The combination of the certificate of technology and general education leads to an Associate of Applied Science in Mental Health Clinical and Counseling Psychology. Students who do not have an associate degree (or higher) in a behaviorally related field will not be eligible for full licensure in the State of Texas. An associate degree (or higher) is required for full licensure. A student can complete the certificate of technology course work, enter the workforce as a counseling intern and continue course work towards an associate degree before receiving their L.C.D.C.

Mental Health Clinical and Counseling Psychology (3MH-PSYC)

Associate of Applied Science

Prerequisite Term	Credit
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
	3
First Term	Credit
SOCW 2361–Introduction to Social Work.....	3
PSYC 2301–General Psychology	3
ENGL 1301–Composition I	3
PSYT 1371–Mental Health Legal and Ethics Issues	3
PHED Activity	1
CMSW 1341–Behavior Modification and Cognitive Disorder	3
	16
Second Term	Credit
PHED Activity	1
PSYT 2331–Abnormal Psychology	3
SCWK 2301–Assessment and Case Management	3
PSYT 1471–Basic Nursing Skills for Mental Health/Psychiatric Technicians	4
PSYT 2301–Psychology of Group Dynamics	3
	14
PostY1Summer	Credit
PMHS 2366–Practicum (or Field Experience)-Psychiatric/Mental Health Services Technician	3
	3

Technical Programs

Third Term	Credit
SPCH 1318–Interpersonal Communications	3
PSYT 2321–Crisis Intervention	3
DAAC 1304–Pharmacology of Addiction	3
DAAC 1311–Counseling Theories.....	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
	15

Fourth Term	Credit
*Humanities or Fine Arts	3
DAAC 2307–Addicted Family Intervention	3
DAAC 2341–Counseling Alcohol and Other Drug Addictions	3
ENGL 1302–Composition II or ENGL 2311–Technical Report Writing.....	3
	12

PostY2Summer	Credit
DAAC 2366–Practicum-Substance Abuse/Addiction Counseling	3
	3
Associate of Applied Science Degree Total	66
Capstone Experience: PMHS 2366 and DAAC 2366	

Mental Health Technician (4MH-TECH)

Certificate of Technology

North Campus

Prerequisite Term	Credit
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
	3

First Term	Credit
SOCW 2361–Introduction to Social Work.....	3
PSYC 2301–General Psychology	3
ENGL 1301–Composition I	3
PSYT 1371–Mental Health Legal and Ethics Issues	3
CMSW 1341–Behavior Modification and Cognitive Disorder	3
	15

Second Term	Credit
PSYT 2331–Abnormal Psychology	3
SCWK 2301–Assessment and Care Management	3
PSYT 1471–Basic Nursing Skills for Mental Health/Psychiatric Technicians	4
PSYT 2301–Psychology of Group Dynamics	3
PMHS 2366–Practicum - Psychiatric/Mental Health Services Technician	3
	13

Certificate of Technology Total	34
Capstone Experience: PMHS 2366	

Substance Abuse Counseling (4MH-SAC)

Certificate of Technology

North Campus

First Term	Credit
SOCW 2361–Introduction to Social Work.....	3
DAAC 1311–Counseling Theories.....	3
DAAC 1304–Pharmacology of Addiction	3
PSYC 2301–General Psychology	3
PSYT 1371–Mental Health Legal and Ethical Issues	3
	15

Second Term	Credit
PSYT 2331–Abnormal Psychology	3
DAAC 2307–Addicted Family Intervention	3
CMSW 1341–Behavior Modification and Cognitive Disorder	3
SCWK 2301–Assessment and Care Management	3
DAAC 2341–Counseling Alcohol and Other Drug Addictions	3
DAAC 2366–Practicum–Substance Abuse/Addiction Counseling	3
	15

Certificate of Technology Total	36
Capstone Experience: DAAC 2366	

Music

Central Campus

The audio engineering curriculum is designed for students seeking careers as sound recording or sound reinforcement engineers. Employment opportunities exist in recording studios, television and radio stations, convention centers, hotels, churches and other private entities. The training places a heavy emphasis on the theory and hands-on application of recording, mixing, and effects-processing equipment. Also required are musical proficiency and an understanding of business and music business systems.

Music Recording (3MUS-RCRD)

Associate of Applied Science Degree

First Term	Credit
ENGL 1301–Composition I	3
MUSI 1181–Class Piano I.....	1
MUSC 1327–Audio Engineering I	3
*MUSI 1301–Music Fundamentals	3
Speech	3
PHED Activity	1
	14

Technical Programs

Techniques of Audio Engineering (4MUS-AUDI)

Certificate of Technology

Central Campus

First Term	Credit
MUAP—Private Music Instruction or MUSI 1188—Class Percussion or MUSI 1192—Class Guitar or MUSI 1183—Class Voice I	1
MUSC 1327—Audio Engineering I	3
MUSI 1181—Class Piano I.....	1
MUSB 1305—Survey of Music Business.....	3
MUSI 1301—Music Fundamentals	3
	14

Second Term	Credit
MUSC 1323—Audio Electronics Troubleshooting	3
MUSC 2427—Audio Engineering II.....	4
MUSC 1331—MIDI I	3
	10

Third Term	Credit
MUSC 2386—Internship—Audio Engineering	3
MUSC 2355—MIDI II	3
MUSC 2101—Audio Engineering Practices	1
MUSC 2447—Audio Engineering III.....	4
	11

Fourth Term	Credit
MUSC 2101—Audio Engineering Practices	1
	1

Certificate of Technology Total **35**

Capstone Experience: MUSC 2386

Broadcast Audio Technology (4MUS-BRCST)

Certificate of Technology

Central Campus

In a unique cooperative effort, San Jacinto College and Alvin Community College are offering a joint Certificate of Technology in Broadcast Audio Technology.

First Term	Credit
MUSC 1327—Audio Engineering I (SJC)	3
RTVB 1380—Cooperative Education—Radio and Television Broadcasting I (ACC).....	3
MUSC 1331—Musical Instrument Digital Interface (SJC)	3
RTVB 1355—Radio Television Announcing (ACC)	3
	12

Second Term	Credit
MUAP—Private Music Instruction or MUSI 1188—Class Percussion or MUSI 1192—Class Guitar or MUSI 1183—Class Voice I	1
ENGL 1302—Composition II or ENGL 2311—Technical Report Writing.....	3
MUSC 1331—MIDI I	3
MUSI 1306—Listening to Music or MUSI 1310—American Popular Music.....	3
MUSC 2427—Audio Engineering II.....	4
PHED Activity	1
	16
Prerequisite	Credit
MATH 1314—College Algebra.....	3
MUSC 2101—Audio Engineering Practices	1
Behavioral or Social Science	3
	7
Third Term	Credit
MUSC 2355—MIDI II	3
MUSC 2101—Audio Engineering Practices	1
MUSC 2447—Audio Engineering III.....	4
MUSI 1211—Music Theory I.....	2
MUSI 1216—Ear Training/Sight Singing I	2
	12
Fourth Term	Credit
MUSB 1305—Survey of Music Business.....	3
MUSC 2386—Internship—Recording Arts Technology/Technician	3
MUSC 1323—Audio Electronics Troubleshooting	3
MUSI 1212—Music Theory II	2
Applied Music Requirement	3
MUSI 1217—Ear Training/Sight Singing II	2
Band, choir, or orchestra	3
Music Appreciation	3
	22
Associate of Applied Science Degree Total	67

Capstone Experience: MUSC 2386

* Subject to placement testing, a student placing out of MUSI 1301 may take MUSI 1211, 1212, 1216, and 1217 during the first year and substitute a three-hour elective for MUSI 1301.

Students may substitute private piano for class piano. A student whose major instrument is piano should substitute another secondary instrument.

Students planning to transfer into a bachelor's degree program in music may substitute MUSI 1307.

Technical Programs

Second Term	Credit
MUSC 2427–Techniques of Audio Engineering II (SJC)	4
MUSC 1323–Audio Electronics Troubleshooting (SJC)	3
RTVB 1317–Survey of Electronic Media (ACC).....	4
RTVB 2380–Cooperative Education–Radio and Television Broadcasting II (ACC).....	3
MUSC 2101–Audio Practices (SJC)	1
	15

Third Term	Credit
MUSC 2447–Audio Engineering III (SJC).....	4
RTVB 1409–Audio/Radio Production I (ACC)	3
RTVB 1391–Special Topics in Radio and Television Broadcasting (ACC).....	3
MUSC 2386–Internship–Recording Arts Technology/Technician (SJC)	3
	13

Certificate of Technology Total **40**

Capstone Experience: MUSC 2386, RTVB 1391

Approved Electives
ENGL 1302

Sound Recording (6MUS-SOUND)

Occupational Certificate

Central Campus

First Term	Credit
MUSB 1305–Survey of Music Business.....	3
MUSC 1331–Musical Instrument Digital Interface	3
*MUSC 1327–Audio Engineering I	3
	9

Second Term	Credit
MUSC 2101–Audio Engineering Practices	1
MUSC 1323–Audio Electronics Troubleshooting	3
*MUSC 2427–Audio Engineering II	4
	8

Occupational Certificate Total **17**

Capstone Experience: MUSC 2101

* Audio Engineering I and II may not be taken concurrently.

Non-Destructive Testing Technology

See *Welding Technology* for related courses

Non-Destructive Testing Technology (3WLD-NDT)

Associate of Applied Science Degree

Central Campus

This program is designed to offer students entry-level skills in quality assurance/quality control of welded and metal products. Students may make this degree relevant to such industries as petrochemical construction and/or maintenance, nuclear construction, machining and metal working, underwater construction technologies, and aviation maintenance. Training in this program conforms to the American Society of Non-Destructive Testing Guidelines, SNT-TC-1A.

First Term	Credit
NDTE 1454–Intermediate Ultrasonics.....	4
METL 1405–Welding Metallurgy I	4
QCTC 1446–Introduction to Testing and Inspection Systems	4
ITSC 1309–Integrated Software Applications I or BCIS 1305–Business Computer Applications	3
PHED Activity	1
	16

Second Term	Credit
NDTE 1410–Liquid Penetrant/Magnetic Particle Testing	4
MATH 1333–Contemporary Mathematics or MATH 1314 College Algebra	3
Approved Elective	4
ENGL 1301–Composition I	3
	14

Third Term	Credit
WLDG 1528–Intro to Shielded Metal Arc Welding (SMAW) or Approved Elective.....	4-5
NDTE 2401–Advanced Ultrasonics.....	4
ENGL 2311–Technical Report Writing.....	3
*Behavioral or Social Sciences.....	3
METL 2435–Welding Metallurgy II.....	4
	19

Fourth Term	Credit
NDTE 1301–Film Interpretation of Weldments.....	3
Speech	3
PHED Activity	1
*Humanities or Fine Arts	3
Eddy Current Testing.....	4
Approved Elective	5

Associate of Applied Science Degree Total **19**
68

Capstone Experience: METL 2435

Approved Electives

DFTG 1405	DFTG 1409	MATH 1316
METL 1313	NDTE 2411	PTAC 2314
QCTC 1341	QCTC 1343	QCTC 1448
WLDG 1534	WLDG 2580	

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Non-Destructive Testing Technology (4WLD-NDT)

Certificate of Technology

Central Campus

Students pursuing the non-destructive testing courses can earn the technical training necessary to begin working in the inspection field. San Jacinto College offers the required classroom training in the basic five methods of MT, PT, VT, UT, and ET, required by the American Society of Non-Destructive Testing Society guidelines, SMT-TC-1A. Training in these areas prepares students for entry-level work in conventional non-destructive testing careers and provides additional knowledge for current inspectors or fabricators.

First Term	Credit
METL 1405–Welding Metallurgy I	4
NDTE 1454–Intermediate Ultrasonics.....	4
QCTC 1446–Introduction to Testing and Inspection Systems	4

12

Second Term	Credit
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Eddy Current Testing or Approved Elective.....	4
ITSC 1309–Integrated Software Applications I or Approved Elective.....	3
QCTC 2331–Standards	3
NDTE 1410–Liquid Penetrant/Magnetic Particle Testing	4

14

Certificate of Technology Total **26**

Capstone Experience: METL 1405

Approved Electives

DFTG 1405	METL 1313	METL 2435
NDTE 1301	NDTE 2401	NDTE 2411
NDTE 1448		

Technical Programs

Quality Assurance Technology (6WLD-QAT)

Occupational Certificate

Central Campus

Persons interested in the field of quality assurance are introduced to Total Quality Management (TQM) concepts and applications as well as statistical testing methods. The students can then use these concepts and methods in industries utilizing auditing practices, quality controls, and inspection techniques.

First Term	Credit
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QCTC 1343–Quality Assurance	3
PTAC 2314–Principles of Quality or QCTC 1448–Metrology.....	3
QCTC 1446–Testing and Inspection Systems	4

10

Second Term	Credit
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QCTC 2331–Standards	3
QCTC 1341–Statistical Process Control.....	3
ITSC 1309–Integrated Software Applications I.....	3

9

Occupational Certificate Total **19**

Capstone Experience: QCTC 1341

Nursing

A criminal background check and/or drug screening is required on all health science students attending clinical courses, or practicum, and may be required prior to admission to the program.

San Jacinto College offers three associate of applied science degree programs in nursing. The generic (basic) RN program is offered on the Central campus. Central campus also offers the Transition to RN program for LVN and Paramedic applicants. The South campus offers the LVN/Paramedic to ADN Mobility degree for LVN and Paramedic applicants. Successful completion of course work in either of these programs qualifies students to make application for the National Council Licensure Examination–Registered Nurse (NCLEX–RN).

In addition to the associate degree nursing programs, the North and South campuses offer vocational nursing programs. Successful completion of course work in this program qualifies students to make application to the Texas Board of Nurse Examiners to take the State Board Examination for Licensed Vocational Nurse.

Technical Programs

Associate Degree Nursing (RN)

Associate of Applied Science Degree

Central Campus

Students applying for admission to the associate degree nursing (ADN) program must submit the following items:

1. Application for admission to San Jacinto College via the website at www.sanjac.edu
2. Associate degree nursing program application (provided online) during application periods
3. Official transcripts –
 - a. High school graduates and GED completers, never having attended college, must have an official transcript from their high school or GED testing center mailed directly to the Central campus Office of Enrollment Services. Applicants enrolled in their senior year of high school should contact the Central campus Office of Enrollment Services regarding transcript requirements.
 - b. College transcripts – Applicants must have official transcripts from all colleges previously attended mailed directly to the Central campus Office of Enrollment Services. Transcripts should be requested as soon as possible; do not wait until the application period beginning dates of April 1 or Sept. 1 to request transcripts. All courses completed outside San Jacinto College District should be evaluated by enrollment services. A transcript evaluation form can be downloaded from the San Jacinto College website. A minimum cumulative GPA of 2.5 is required for all applicants.

Note: To ensure accuracy, identify all names used in attending prior institutions that differ from the name submitted on the ADN program request form.

4. Completion of the following prerequisite courses:

ENGL 1301Composition I

MATH 1314 College Algebra OR MATH 1333 Contemporary Mathematics for Technical Programs (or higher level MATH course)

BIOL 2401Human Anatomy and Physiology I AND BIOL 2402 Human Anatomy and Physiology II, AND BIOL 2420 Microbiology and Pathology (or BIOL 2421 Introductory Microbiology)

*** Biology courses must be taken within the last five years with no grade less than a "C."*

5. Official test scores – Applicants seeking admission must submit official HESI A2 scores to the Central campus Office of Enrollment Services. A composite score of 75 percent and a score of 75 percent in each section of the English, Math and Science is required. The Personality and Learning Styles sections are also required, but will not be used in determining admissions. Official test scores should be requested as soon as possible. Please contact the testing center for dates available to test on campus.

6. Email address – primary/preferred mode of communication – You can get a free email address at www.yahoo.com or www.hotmail.com.

Selection Criteria

Students who apply for admission to the associate degree nursing program will be selected on the basis of the highest HESIA2 test scores and the highest cumulative grade point average. A minimum cumulative GPA of 2.5 is required for all students who have previously attended college. Meeting minimal entry requirements does not guarantee program admission.

Students must apply for admission to the associate degree nursing program by submitting an associate degree nursing program application and all required official documents at the same time to the Central campus Office of Enrollment Services during the application period stated below:

Application Periods

Fall Term: Sept. 1 – Nov. 1

Spring Term: April 1 – June 1

Transcripts and Test Scores

Students should request transcripts and test scores be mailed directly to the Central campus Office of Enrollment Services as soon as possible. Transcripts and test scores may be requested prior to the application period beginning dates. Applicant will need to fill out a Transcript Evaluation Form if transferring any courses. Requesting transcripts and test scores as soon as possible will expedite the processing of applicants' documents. Do not send documents to the North campus or the South campus. It is imperative the Central campus Office of Enrollment Services be made aware of all names utilized on prior documents if names differ from the name submitted on the associate degree nursing program request form.

Criminal Background and Drug Screening

A criminal background check and drug screening is now required prior to enrolling in the Nursing program and as part of the application process. A valid receipt from PreCheck, Inc. and Deer Park Family Clinic must be submitted with your application to the Office of Enrollment Services. Please note that the criminal background check and drug screening should be completed and submitted with the application during the application period ONLY. Any criminal background

Technical Programs

check or drug screening done outside the application period will NOT be considered. Applicants to the associate degree nursing program will be notified by email regarding their program admission status. Applicants who are not selected for admission to the associate degree nursing program must re-apply. Applicants who are accepted for admission to the associate degree nursing program, but who do not enroll, must also re-apply.

Associate Degree Nursing (RN) (3NURS)

Associate of Applied Science Degree

Central Campus

Prerequisites	Credit
BIOL 2401–Human Anatomy and Physiology I	4
BIOL 2402–Human Anatomy and Physiology II	4
BIOL 2420–Microbiology and Pathology or BIOL 2421–Introductory Microbiology	4
ENGL 1301–Composition I	3
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
	18

Note: Students must successfully complete BIOL 2401, BIOL 2402, and BIOL 2420 or BIOL 2421, and ENGL 1301, and MATH 1314 or MATH 1333 prior to enrolling in any nursing course.

First Term	Credit
RNSG 1413–Foundations for Nursing	4
RNSG 1144–Intermediate Nursing Skills II	1
RNSG 1215–Health Assessment	2
RNSG 1160–Clinical Nursing Introduction	1
PSYC 2301–General Psychology	3
	11

Second Term	Credit
RNSG 1341– Common Concepts of Adult Health	3
RNSG 1261–Clinical Nursing Common Concepts of Adult Health.....	2
RNSG 1343– Complex Concepts of Adult Health.....	3
RNSG 1262–Clinical Nursing Complex Concepts of Adult Health.....	2
RNSG 1301–Pharmacology.....	3
PSYC 2314–Life-Span Growth and Development	3
PHED Activity	1
	17

PostY1Summer	Credit
RNSG 2231–Advanced Concepts of Adult Health.....	2
RNSG 2260–Clinical Nursing Advanced Concepts of Adult Health	2
	4

Third Term	Credit
RNSG 2201–Care of Children and Families	2
RNSG 2262–Clinical Nursing Care of Children and Families	2
RNSG 1251–Care of Child-Bearing Families.....	2
RNSG 1263–Clinical Nursing Care of Childbearing Families.....	2
ENGL 2311–Technical Report Writing.....	3
PHED Activity	1
	12

Fourth Term	Credit
RNSG 2213–Mental Health Nursing	2
RNSG 2261–Clinical Nursing Mental Health	2
RNSG 2121–Management of Client Care.....	1
RNSG 2263–Clinical Nursing Management of Client Care.....	2
**Humanities or Fine Arts.....	3
	10

Associate of Applied Science Degree Total

72

Verification of Workforce Competencies

Capstone Experience: RNSG 2121, Comprehensive Exam

External Learning Experience: RNSG 2263

Credential Exam: NCLEX–RN

* Students must successfully complete BIOL 2401, BIOL 2402, and BIOL 2420 or BIOL 2421, and ENGL 1301, and MATH 1314 or MATH 1333 prior to enrolling in any nursing course. College preparatory courses (those courses which have numbers beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual /Performing Arts section of the Transfer Core Curriculum.

Note: Course outline is representative of Fall entry only. Adjustments will be made for Spring entry.

Associate Degree Nursing, Transition

ADN - Transition to RN (LVN to RN) (3NUR-LTRN)

Associate of Applied Science Degree

Central Campus

Prerequisites	Credit
BIOL 2401–Human Anatomy and Physiology I	4
BIOL 2402–Human Anatomy and Physiology II	4
BIOL 2420–Microbiology and Pathology	4
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
PSYC 2301–General Psychology	3
PSYC 2314–Life-span Growth and Development.....	3
ENGL 1301–Composition I	3
PHED Activity	1
**RNSG 1215 Health Assessment.....	2
	27

Technical Programs

First Term	Credit
RNSG 1301–Pharmacology.....	3
RNSG 2207–Transition to Nursing Practice.....	2
RNSG 1166–Practicum Nursing Transition.....	1
RNSG 1343– Complex Concepts of Adult Health.....	3
RNSG 1262–Clinical Nursing Complex Concepts of Adult Health.....	2
<hr/>	
	11

Second Term	Credit
RNSG 1251–Care of Childbearing Families.....	2
RNSG 1263–Clinical Nursing Care of Childbearing Families.....	2
RNSG 2231–Advanced Concepts of Adult Health.....	2
RNSG 2260–Clinical Nursing Concepts of Adult Health.....	2
ENGL 2311–Technical Report Writing.....	3
<hr/>	
	11

PostY1Summer	Credit
RNSG 2201–Care of Children and Families.....	2
RNSG 2262–Clinical Nursing Care of Children and Families.....	2
<hr/>	
	4

Third Term	Credit
RNSG 2213–Mental Health Nursing.....	2
RNSG 2261–Clinical Nursing Mental Health.....	2
RNSG 2121–Management of Client Care.....	1
RNSG 2263–Clinical Nursing Management of Client Care.....	2
***Humanities or Fine Arts.....	3
PHED Activity.....	1
<hr/>	
	11

Associate of Applied Science Degree Total **64**

Verification of Workforce Competencies

Capstone Experience: RNSG 2121, RNSG 2263, Comprehensive Exit Exam

Credential Exam: NCLEX–RN

* Students must successfully complete BIOL 2401, BIOL 2402, and BIOL 2420 or BIOL 2421, and ENGL 1301, and MATH 1314 or MATH 1333 prior to enrolling in any nursing course. College preparatory courses (those courses which have numbers beginning with 0) do not apply toward the associate degree.

** An applicant needs special permission from the department chair to take this course.

*** Courses which satisfy this requirement are listed in the Humanities and Visual /Performing Arts section of the Transfer Core Curriculum.

Note: The course outline is representative of Fall entry only. Adjustments will be made for Spring entry.

Note: The LVN applicant to the Transition to RN program must have a current Texas License for Practice as a Vocational Nurse.

Paramedic to RN Specialty (3NUR-PTRN)

Associate of Applied Science Degree

Central Campus

Pre-requisites	Credit
**RNSG 1413–Foundations for Nursing Practice.....	4
BIOL 2401–Human Anatomy and Physiology I.....	4
BIOL 2402–Human Anatomy and Physiology II.....	4
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra.....	3
PSYC 2301–General Psychology.....	3
PSYC 2314–Lifespan Growth and Development.....	3
*ENGL 1301–Composition I.....	3
PHED Activity.....	1
***RNSG 1215–Health Assessment.....	2
BIOL 2420–Microbiology and Pathology.....	4
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	31

** Paramedic applicants only. Applicants need special permission from the department chair to take this course.

First Term	Credit
RNSG 1301–Pharmacology.....	3
RNSG 2207–Transition to Nursing Practice.....	2
RNSG 1166–Practical Nursing Transition.....	1
RNSG 1343– Complex Concepts of Adult Health.....	3
RNSG 1262–Clinical Nursing Complex Concepts of Adult Health.....	2
<hr/>	
	11

Second Term	Credit
RNSG 1251–Care of Childbearing Families.....	2
RNSG 1263–Clinical Nursing Care of Childbearing Families.....	2
RNSG 2231–Advanced Concepts of Adult Health.....	2
RNSG 2260–Clinical Nursing Advanced Concepts of Adult Health.....	2
ENGL 2311–Technical Report Writing.....	3
<hr/>	
	11

PostY1Summer	Credit
RNSG 2201–Care of Children and Families.....	2
RNSG 2262–Clinical Nursing Care of Children and Families.....	2
<hr/>	
	4

Technical Programs

Classes enroll in January and August of each year. The application periods are Sept. 1–Oct. 15 for Spring admission and April 20–May 20 for Fall admission.

The following documentation must be submitted to the South campus nursing program director:

- Current Texas license to practice—Licensed Vocational Nurses must have a current Texas license. Paramedics must be Texas certified.
- Employment documentation. Applicants must submit documentation of employment in a clinical setting during the recent three-year period, including full-time employment with a minimum of 1,000 hours during one calendar year.
- Copies of all transcripts and transcript evaluations. Applicant must have a minimum of a 2.5 GPA in all required prerequisite courses to be considered for admission. As of the Spring 2011 semester, applicants must have a 2.75 GPA in all required courses to be considered for admission.
- Current CPR card with Health Care Provider status (LVN) or ACLS certified (paramedic)

In order for credit earned in a required biology course to be applicable to the ADN Mobility program, credit must have been earned within the past five years and the grade earned must have been a C or above. Credit earned in a required biology course exceeds the five-year stipulation if the credit was earned five or more years prior to the first term in which the student enrolls in the program.

There are a limited number of student spaces; therefore, students are admitted on a competitive basis. Students who apply for admission to the department of nursing will be selected on the basis of grade point average. The student must maintain an overall grade point average of 2.25 or above and earn at least 24 credit hours at San Jacinto College in order to graduate from the LVN/Paramedic–ADN Mobility program with an Associate of Applied Science in Nursing. Students must also complete an Admission Assessment Exam (A2) and achieve percentage scores in each category as determined by the curriculum committee in the LVN/Paramedic to ADN Mobility program. All prospective students are required to have a criminal background check completed prior to consideration for admission. Any student who has been convicted of misdemeanors (other than minor traffic violations), felonies will not be admitted to the program. Random urine drug screens may be required during the program. Positive drug screens will be cause for dismissal from the program. Students may petition to the department for further guidance regarding criminal background checks or urine drug screening test.

Applicants not eligible for entry are those who have received a grade of D or lower in more than one nursing or biology course or those who have withdrawn from more than two prerequisite RNSG courses or those who have withdrawn from one pre-requisite RNSG course more than once. An

Third Term	Credit
RNSG 2213—Mental Health Nursing	2
RNSG 2261—Clinical Nursing Mental Health	2
RNSG 2121—Management of Client Care.....	1
RNSG 2263—Clinical Nursing Management of Client Care.....	2
****Humanities or Fine Arts.....	3
PHED Activity	1
	11
Associate of Applied Science Degree Total	68

Verification of Workforce Competencies
Capstone Experience: RNSG 2121, RNSG 2263, Comprehensive Exit Exam

Credential Exam: NCLEX–RN

* Students must successfully complete BIOL 2401, BIOL 2402, and BIOL 2420 or BIOL 2421, and ENGL 1301, and MATH 1314 or MATH 1333 prior to enrolling in any nursing course. Students desiring to obtain a baccalaureate degree should take MATH 1314, College Algebra. Spring entry.

** Paramedic applicants only. Applicant needs special permission from department chair to take this course.

*** Applicant needs special permission from the department chair to take this course.

****Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Note: The paramedic applicant must show proof of EMT/Paramedic Certification from the Texas Department of State Health Services.

Associate Degree Nursing, Mobility

The ADN mobility program is a career mobility opportunity designed for LVNs and paramedics who desire to continue their education while maintaining employment. It is a program specifically designed to meet the unique learning needs of the LVN and paramedic. The nursing program is offered as a program that can be completed in three (3) terms. The ADN mobility program is approved by the Board of Nurse Examiners for the State of Texas and accredited by the National League of Nursing Accrediting Commission (NLNAC) (National League for Nursing Accrediting Commission, 61 Broadway–33rd floor, New York, NY 10006).

Program Admission Criteria

To be considered for acceptance into the ADN program, students must meet the College’s general admission requirements, as well as the program admission criteria, and must be assessed for college readiness in the areas of reading, mathematics, and writing (see the Texas Success Initiative section of this catalog).

All prerequisite courses must be completed prior to applying to the ADN Program. Permission must be obtained from the program director in order to enroll in RNSG 1140, RNSG 1301, RNSG 1215, and RNSG 1108. Applicants are encouraged to complete all other prerequisite courses prior to seeking enrollment in RNSG 1140, RNSG 1301, RNSG 1215, and RNSG 1108. (RNSG 1140 is required for all paramedics and may be required for some LVNs.)

Technical Programs

example includes applicants who have received two Ds in biology courses, two Ds in RNSG (or NURS) courses, or one D in biology and one D in RNSG (or NURS) courses. Applicants who have failed RNSG or NURS courses prior to their admission into a vocational nursing or a paramedic program will be considered for admission on a conditional basis if they have graduated from the respective programs with a 3.25 GPA.

LVN/Paramedic to ADN Mobility (3NUR-LMOB)

Associate of Applied Science Degree

South Campus

Prerequisites	Credit
BIOL 2401—Human Anatomy and Physiology I	4
BIOL 2402—Human Anatomy and Physiology II	4
BIOL 2420—Microbiology and Pathology	4
*MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3
PSYC 2301—General Psychology	3
PSYC 2314—Lifespan Growth and Development	3
PHED Activity	1
PHED Activity	1
Approved Elective	3
RNSG 1108—Dosage Calculations for Nursing	1
RNSG 1215—Health Assessment	2
RNSG 1301—Pharmacology	3
RNSG 1140—Nursing Skills for the Articulating Students.....	1
	33

First Term	Credit
RNSG 1209—Introduction to Nursing.....	2
RNSG 1417—Concepts in Nursing Practice I for the Articulating Student.....	4
RNSG 1260—Clinical: Concepts in Nursing Practice I for the Articulating Student.....	2
ENGL 1301—Composition I	3
	11

Second Term	Credit
RNSG 1270—Concepts of Maternity/Newborn Nursing and Women's Health for the Articulating Student	2
RNSG 2161—Clinical: Concepts of Maternal/Newborn Nursing and Women's Health for Articulating Students	1
ENGL 1302—Composition II or ENGL 2311—Technical Report Writing.....	3
RNSG 1249—Concepts of Pediatric Nursing Practice.....	2
RNSG 1163—Clinical: Concepts of Pediatric Nursing Practice.....	1
	9

Third Term	Credit
RNSG 2270—Concepts of Mental Health Nursing Practice for the Articulating Student	2
RNSG 2162—Clinical: Concepts of Mental Health Nursing Practice for the Articulating Student	1
RNSG 2271—Concepts of Advanced Nursing Practice and Management for the Articulating Student.....	2
RNSG 2163—Clinical: Concepts of Advanced Nursing Practice and Management for the Articulating Student.....	1
**Humanities/Fine Arts.....	3
	9

Associate of Applied Science Degree Total 61
Capstone Experience: RNSG 2271 and 2163, Comprehensive Exit Exam

Credential Exam: NCLEX—RN

Approved Electives		
CHEM 1411	MATH 1342	HECO 1322
BIOL 2305 SPCH 1315		SPCH 1318

An applicant needs special permission from the department chair to take these courses: RNSG 1108, RNSG 1215, RNSG 1301 and RNSG 1140. RNSG 1140 is required for all paramedics and may be required for some LVNs.

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core.

Vocational Nursing (VN)

The Vocational Nursing curriculum includes a combination of class lectures, nursing skills training, and clinical experience in a variety of health care settings. The program is approved by the Texas Education Agency and the Texas Board of Nursing. Upon successful completion of the program, graduates may apply to take the State Board Examination. Those students who pass this examination are granted a license by the Texas Board of Nursing to practice as a licensed vocational nurse.

Applicants for the program must meet the requirements for general admission to the College and must also meet the following specific requirements:

- Be a high school graduate or pass the GED test
- Pass the placement test with acceptable scores, and if required, complete needed college preparatory courses
- Have a GPA minimum of 2.25 on college-level coursework
- Pass a physical examination

Effective Jan. 1, 1996, a person who has been convicted of a felony that relates to the duties and responsibilities of a licensed vocational nurse may be disqualified from obtaining licensure as a licensed vocational nurse. (213.28 Board of Nurse Examiners for the State of Texas; Rules and Regulations, September 2004.) These issues are addressed directly to the Texas Board of Nursing by the applicant.

Students who apply for admission and who meet the stated requirements will be selected for admission on the basis of placement test scores, entrance exams (North campus), and grades on college-level coursework completed at San Jacinto

Technical Programs

College or other accredited institutions of higher education. Applicants who are accepted for admission will be notified via email. Applicants who are not selected for admission to the vocational nursing program for a given term must re-apply for admission if they wish to be considered for admission during a subsequent term; applicants who are accepted for admission, but who do not enroll, must also re-apply.

For detailed information concerning admission requirements, deadlines for submitting applications and related documents, and requirements for completing the program, contact the department of vocational nursing.

The program is a full year of training, including 576 classroom and 880 laboratory/clinical hours. Students completing each of the courses specified in the program with grades of C or above are awarded a certificate of technology.

Vocational Nursing (4NUR-LVN)

Certificate of Technology

North and South Campuses

The prerequisite for enrolling in the first term is acceptance into the program.

First Term	Credit
VNSG 1116–Nutrition or HECO 1322–Principles of Nutrition.....	1
VNSG 1227–Essentials of Medication Administration.....	2
VNSG 1320–Anatomy and Physiology for Allied Health or BIOL 2401–Human Anatomy and Psychology I and BIOL 2402–Human Anatomy and Physiology II.....	3
VNSG 1323–Basic Nursing Skills.....	3
VNSG 2331–Advanced Nursing Skills.....	3
VNSG 1170–Clinical Prep.....	1
VNSG 1260–Clinical I.....	2
	15

Second Term*	Credit
VNSG 1262–Clinical III.....	2
VNSG 1301–Mental Health and Mental Illness.....	3
VNSG 1231–Pharmacology.....	2
VNSG 1329–Medical–Surgical Nursing I.....	3
VNSG 1361–Clinical II.....	3
VNSG 1226–Gerontology.....	2
	15

Third Term*	Credit
VNSG 1119–Professional Development.....	1
VNSG 1230–Maternal Neonatal Nursing.....	2
VNSG 1234–Pediatrics.....	2
VNSG 1332–Medical Surgical Nursing II.....	3
VNSG 2260–Clinical IV.....	2
VNSG 2261–Clinical V.....	2
	12

Certificate of Technology Total

42

Capstone Experience: VNSG 2260

* The prerequisite for enrolling in the second and third terms is successful completion of each preceding term with a minimum grade of C in each course.

** VNSG 1226 and VNSG 1262 will rotate second and third term.

Occupational Health and Safety Technology

Occupational Health and Safety Technology is a specialized branch of the health professions focusing on the environment of workers. Professionals in this field strive to find and eliminate conditions in the workplace that may result in occupational injury or disease. This is achieved through a process of anticipation, recognition, evaluation, and control of the various stresses that contribute to unsafe working environments.

The occupational health and safety technology program is multi-disciplinary in nature, providing students with relevant exposure to biological, chemical, physical, mathematical and health sciences, as well as a thorough introduction to occupational health and safety concepts. Common occupational safety concerns deal with safety hazards involved with confined space entry, lockout, hazard communication, and compliance with safety standards, fire prevention, and other areas.

Occupational safety personnel are expected to perform the following functions:

- Identify and analyze/accident- and loss-producing conditions.
- Develop accident prevention and loss control methods, procedures, and programs.
- Communicate accidents- and loss-control data to individuals on a need-to-know basis.
- Measure and evaluate the effectiveness of accident and loss control systems.

The curriculum is modeled from guidelines of the American Board of Industrial Hygiene (ABIH) and the Board of Certified Safety Professionals (BCSP). The ABIH and BCSP began a jointly sponsored certification program through The Council on Certification of CCHEST administers the testing and students who pass the certification examination, and pay the required fees, are authorized to use the title occupational

Technical Programs

Technical Programs

health and safety technologist, and to use the initials OHST after their names and may complete curriculum at upper-level universities leading toward certified safety professional and/or certified industrial hygienist.

Occupational Health and Safety Technology (3OCC-HLTH)

Associate of Applied Science Degree

Central Campus

First Term	Credit
EPCT 1307—Introduction to Environmental, Safety and Health Technology	3
ENGL 1301—Composition I	3
*MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	2
CHEM 1411—General Inorganic Chemistry I.....	4
PHED Activity	1
	13
Second Term	Credit
EPCT 1341—Principles of Industrial Hygiene	3
OSHT 1309—Physical Hazards Control	3
OSHT 1313—Accident Prevention Inspection and Investigation	3
**CHEM 1412—General Inorganic Chemistry II or PHYS 1401—College Physics I or BIOL—Biological Science	3
OSHT 2320—Safety Training Presentation Techniques.....	2
BCIS 1305—Business Computer Applications or ITSC 1309—Integrated Software Applications I	3
	17
Third Term	Credit
ENGL 2311—Technical Report Writing	3
OSHT 2401—OSHA Regulations	4
OSHT 2305—Ergonomics and Human Factors	3
EPCT 2333—Environmental Toxicology.....	3
PHED Activity	1
***Humanities or Fine Arts	3
	17

Fourth Term	Credit
OSHT 2309—Safety Program Management.....	3
OSHT 1307—Construction Site Safety and Health.....	3
Speech	3
***Behavioral or Social Science.....	3
EPCT 1305—Environmental Regulations Overview or EPCT 1313—Contingency Planning or OSHT 1321—Fire Protection Systems or OSHT 2380—Cooperative Education - Occupational Safety and Health Technology/Technician or EMSP 1501—Emergency Medical Technician - Basic or EMSP 1160—Clinical - Emergency Medical Technology	3
	15

Associate of Applied Science Degree Total 65-68

Capstone Experience: OSHT 2309

External Learning Experience: OSHT 2380

* Students desiring to obtain a baccalaureate degree should take MATH 1314—College Algebra.

** Students desiring to obtain a baccalaureate degree should take CHEM 1412.

*** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Approved Electives		
(EMSP 1501 and EMSP 1160)	EPCT 1313	
EPCT 1305	OSHT 1325	OSHT 2380

Occupational Health and Safety Technology (4OCC-HLTH)

Certificate of Technology

Central Campus

First Term	Credit
EPCT 1307—Introduction to Environmental Safety and Health Technology	3
OSHT 1309—Physical Hazards Control	3
OSHT 1313—Accident Prevention, Inspection and Investigation.....	3
OSHT 1321—Fire Protection Systems.....	3
EPCT 1341—Principles Industrial Hygiene	3
	15

Technical Programs

Second Term	Credit
OSHT 1307–Construction Site Safety and Health.....	3
OSHT 2401–OSHA Regulations - General Industry	4
OSHT 2305–Ergonomics and Human Factors in Safety.....	3
OSHT 2309–Safety Program Management.....	3
EPCT 2333–Environmental Toxicology.....	3
OSHT 2320–Safety Training Presentation Techniques.....	3
EPCT 1305–Environmental Regulations Overview or EPCT 1313–Contingency Planning or OSHT 1321–Fire Protection Systems or OSHT 2380–Cooperative Education - Occupational Safety and Health Technology/Technician or EMSP 1501–Emergency Medical Technician - Basic or EMSP 1160–Clinical - Emergency Medical Technology	3
	22
Certificate of Technology Total	34-37

Capstone Experience: OSHT 2309

External Learning Experience: OSHT 2380

Approved Electives

(EMSP 1501 and EMSP 1160)	EPCT 1313
EPCT 1305	OSHT 1325
	OSHT 2380

Paralegal

Paralegal (3PARA-LGL)

Associate of Applied Science Degree

North Campus

The paralegal curriculum at San Jacinto College is designed to provide students with the knowledge and skills required to work under the general direction of attorneys to assist them in the completion of legal tasks and is ABA approved. The program provides knowledge and skills for employment in law firms, courts, utility companies, title companies, trusts and mortgage departments of banks, government agencies, industrial companies and other legal departments. A paralegal may not provide legal services directly to the public unless specifically authorized by law.

First Term	Credit
ENGL 1301–Composition I	3
LGLA 1307–Introduction to Law and Legal Professions.....	3
LGLA 1303–Legal Research.....	3
LGLA 1345–Civil Litigation.....	3
LGLA 1317–Law Office Technology.....	3
	15

Second Term	Credit
ENGL 1302–Composition II	3
LGLA 1347–Civil Litigation II	3
LGLA 1353–Wills, Trusts and Probate Administration.....	3
LGLA 1355–Family Law	3
*MATH 1314 College Algebra or MATH 1333 Contemporary Mathematics or Natural Science	3
PHED Activity	1
	16

Pre-requisite	Credit
SPCH 1315–Public Speaking or SPCH 1318–Interpersonal Communication or SPCH 1321–Business and Professional Speech	3
	3

Third Term	Credit
LGLA 1351–Contracts.....	3
LGLA 1305–Legal Writing	3
LGLA 2303–Torts and Personal Injury Law	3
GOVT 2301–United States and Texas Politics and Constitutions.....	3
PHED Activity	1
*Humanities or Fine Arts	3
	16

Fourth Term	Credit
LGLA 2311–Business Organizations.....	3
LGLA 2309–Real Property.....	3
LGLA 1391–Special Topics in Legal Assistant.....	3
LGLA 2313–Criminal Law and Procedure.....	3
LGLA 2388–Internship–Paralegal/Legal Assistant.....	3
	15

Associate of Applied Science Degree Total

65

External Learning Experience: LGLA 2388

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Pharmacy Technician

Pharmacy technicians are a vital member of the health care team. Working under the supervision of the pharmacist, the pharmacy technician performs those tasks associated with the preparation and distribution of medication. Exciting career opportunities include, but are not limited to, positions in hospitals, retail pharmacies, nursing homes, compounding pharmacies, home health care, nuclear pharmacies, insurance companies, and public and government health agencies.

The San Jacinto College pharmacy technician program is a nine-month or 12-month certificate program designed to provide applicants with the skills and knowledge to pass the Pharmacy Technician Certification Examination (PTCE) as well as qualify for entry-level positions in a variety of pharmacy settings.

Technical Programs

Program Overview

The pharmacy technician program at San Jacinto College is a nationally-accredited program under the guidelines of the American Society of Health-System Pharmacists (ASHP). The program curriculum requires students to complete 30 credit hours that total 848 contact hours which consists of a combination of lecture, on-campus laboratory and clinical training. The emphasis of the program is on training students to work in retail and hospital pharmacies. Upon completion of the program, students are awarded a certificate of technology. After graduation, students apply to take the Pharmacy Technician Certification Examination (PTCE). A pharmacy technician must pass the certification examination and register with the Texas State Board of Pharmacy (TSBP) to practice as a certified pharmacy technician (CPhT) in the state of Texas.

The program includes two clinical courses. Clinicals are unpaid positions in which students are supervised by the employees at the clinical's site. The first clinical is a 160-contact hour, three credit hour, external learning experience course that takes place in a retail pharmacy. The second clinical is a 160-contact hour, three credit hour external learning experience course that takes place in a hospital pharmacy. Clinicals are scheduled according to the hours of the site and may vary among day, evening and night shifts. We cannot guarantee any specific site, but every effort will be made to accommodate the student. Students are responsible for their own transportation to and from clinical sites.

Program Admission Procedures

The top qualified applicants will be contacted for an interview/orientation with the program director. The interview/orientation provides an opportunity to:

- Review applicant assessment *
- Discuss the program and career opportunities
- Determine educational plan
- Receive instructions for registration

* Applicants demonstrating a need for additional coursework to equip them for success in the pharmacy technician program must successfully complete suggested course(s) prior to admission to the program.

* Computer proficiency is recommended for the certificate program. Students who do not have computer proficiency are encouraged to take BCIS 1305 or ITSC 1309.

Program Admission Criteria

Applicants must meet the College's general admission requirements as well as the program admission criteria.

- San Jacinto College general admission requirements: The following must be completed/submitted to the Office of Enrollment Services prior to applying to the program.
 1. San Jacinto College admissions application

2. Official high school transcripts or equivalent
3. Transcripts of course work done at other colleges/universities
4. Placement test scores

- Pharmacy technician program admission requirements: The following must be completed/submitted to the pharmacy technician program by the application deadline.
 1. Pharmacy technician program application
 2. Criminal background check*
 3. Drug screen**
 4. Student immunization records
 5. Registration as a technician trainee with the Texas State Board of Pharmacy

* Criminal background check must be clear in order to qualify for admission into the program.

** Drug screen must be negative in order to qualify for admission into the program.

Pharmacy Technician (4PHAR)

Certificate of Technology

North and South Campuses

First Term	Credit
PHRA 1301—Introduction to Pharmacy.....	3
PHRA 1305—Drug Classification I	3
PHRA 1309—Pharmaceutical Mathematics I	3
PHRA 1313—Community Pharmacy Practice.....	3
*PHRA 1360—Clinical—Community Pharmacy.....	3
	15

Second Term	Credit
PHRA 1372—Drug Classification II	3
PHRA 1347—Pharmaceutical Mathematics II	3
PHRA 1345—Intravenous Admixture and Sterile Compounding.....	3
PHRA 1349—Institutional Pharmacy Practice	3
*PHRA 2360—Clinical—Institutional Pharmacy	3
	15

Certificate of Technology Total **30**

Capstone Experience: PHRA 2360

* North campus offers PHRA 1360 AND PHRA 2360 in a third term.

Physical Therapist Assistant

Physical therapist assistants work under the supervision of physical therapists in a variety of settings. Opportunities include, but are not limited to, positions in out-patient clinics, hospitals, long-term care facilities, pediatric centers, schools and home health agencies. Physical therapist assistants provide

services for patients which help decrease pain, improve mobility, restore function and minimize disabilities.

The physical therapist assistant program at the San Jacinto College South campus is a nationally-accredited program under the guidelines of The Commission on Accreditation in Physical Therapy Education. The program is a total of 72 credit hours, and the student is awarded an A.A.S. degree upon completion of the program. After graduation, the student then applies to take The National Physical Therapist Assistant Examination. A physical therapist assistant must pass the licensure exam to practice as a physical therapist assistant in most states including the state of Texas.

Prior to entering the physical therapist assistant program, students may take any of the non-PTHA courses required. Non-PTHA courses not taken prior to entering must be taken concurrent with the physical therapist assistant curriculum plan.

Physical therapist assistant students must earn an average of a 75 or above in the physical therapist assistant (PTHA) classes and a “C” or better in biology courses. Additionally, the student must maintain an overall grade point average of at least 2.0 in order to graduate from the physical therapist assistant program.

Admission Requirements

Applicants must meet the College’s general admission requirements. Acceptance into the physical therapist assistant program is competitive. Students must complete the prerequisite courses with a minimum 2.75 GPA, complete the application form, complete 40 hours of observation in physical therapy, and have three letters of recommendation (must use required form). All forms are available at www.sanjac.edu/physical-therapy. The observation hours must be obtained from at least two of the following areas: out patient, in-patient, rehabilitation, acute care hospital, pediatrics or home health. The student must also have three letters of recommendation, and it is strongly suggested that one of the letters be from a physical therapist.

Students are required to have a criminal background check and urine drug screen prior to admission into the program. Any student who has been convicted of misdemeanors (other than minor traffic violations), felonies or have a positive urine drug screen will not be admitted into the program. The student may petition to the department for further guidance regarding the criminal background check or urine drug screen. Students must also have proof of immunizations prior to attending the first clinical rotation. The top qualified students will be interviewed.

Applications for students not selected into the program will be held as inactive for two years. If a student wishes to re-apply during those two years, a letter must be sent or emailed to the PTA department requesting that their file be reactivated.

Technical Programs

Steps to complete admission:

1. Apply for admission into San Jacinto College. Send official transcripts from colleges/universities other than San Jacinto College to the Office of Enrollment Services at San Jacinto College South. Ask for a transcript evaluation. Send all non-official transcripts to the PTA department.
2. Fill out PTA program application and return it to the PTA department from Jan. 1 through Mar. 15.
3. Complete prerequisite classes by the end of Spring semester.
4. Have documentation of observation hours turned in no later than the end of Spring semester.
5. Have recommendation letters turned in no later than the end of Spring semester.

Cost: The cost of the PTA program is the same as for any student at San Jacinto College with the addition of:

- \$75 for lab fees/insurance
- \$52 for a background check
- \$25 CPR certification prior to internships
- \$10 name tag

Note: Uniforms may need to be purchased for some clinical rotations.

Students will also incur additional travel expenses for clinical rotations

Students will be responsible for their own immunizations.

Physical Therapist Assistant (3PH-THRPY)

Associate of Applied Science Degree

South Campus

Prerequisite Term	Credit
ENGL 1301—Composition I	3
MATH 1333 Contemporary Mathematics or MATH 1314 College Algebra	3
PSYC 2301—General Psychology	3
BIOL 2401—Human Anatomy and Physiology I	4
PTHA 1201—The Profession of Physical Therapy.....	2

15

Technical Programs

First Term	Credit
PHED 1123–Weight Training	1
PTHA 1413–Functional Anatomy	4
BIOL 2402–Human Anatomy and Physiology II	4
PTHA 1305–Basic Patient Care Skills	3
	12

Second Term	Credit
PTHA 1431–Physical Agents	4
PTHA 2409–Therapeutic Exercise	4
ENGL 1302–Composition II or ENGL 2311–Technical Report Writing.....	3
PSYC 2314–Life Span Growth and Development.....	3
PHED Activity	1
	15

PostY1Summer	Credit
PTHA 1321–Clinical Pathophysiology	3
PTHA 1360–Clinical I–PTA	3
	6

Third Term	Credit
PTHA 2431–Management of Neurological Disorders	4
PTHA 2435–Rehabilitation Techniques	4
PTHA 2239–Professional Issues.....	2
	1

Fourth Term	Credit
Speech	3
PTHA 2460–Clinical II–PTA.....	4
PTHA 2461–Clinical III–PTA.....	4
*Humanities or Fine Arts	3
	14
Associate of Applied Science Degree Total	72

Capstone Experience: PTHA 2461

Approved Electives

ENGL 1301 MATH 1333

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Pipefitting Technology

Pipefitting Technology (CE-PIPEFT)

Continuing Education Certificate

Central and North Campuses

	Contact Hours
PFPB 1007–Introduction to Pipefitting	128
PFPB 1043–Pipefitting Fabrication and Blueprint Reading	128
PFPB 2032–Pipefitting Fabrication and Blueprint Reading	128
PFPB 2033–Pipefitting, Advanced Fabrication and Installation.....	128
Certificate of Technology Total	512
Capstone Experience: PFPB 2033	

Plumbing and Pipefitting

Plumbing and Pipefitting Technology

Continuing Education Certificate

North Campus

	Contact hours
PFPB 1003–Basic Plumbing Skills (Plumbing I)	72
PFPB 1001–Basic Pipefitting: Installation and Rigging (Plumbing IIA)	72
PFPB 1071–Plumbing Standards for Water Supplies (Plumbing IIB)	72
PFPB 2033–Pipefitting: Advanced Fabrication and Installation (Plumbing IIIA).....	72
PFPB 2071–Installation and Repair of Potable Water Systems (Plumbing IIIB).....	72
PFPB 2032–Pipefitting Standards, Specifications, and Installation (Plumbing IVA).....	72
PFPB 2031–Advanced Technologies and Specialized Applications for Piping Trades (Plumbing IVB)	72
Certificate of Technology Total	504
Capstone Experience: PFPB 2031	

Process Technology

The process technology department is a direct link to the largest industry in the greater Houston area and the Texas Gulf Coast region. In the past very little formal training was required prior to taking a job in the chemical process industry. However, companies in the Houston area now require more education for their entry-level technicians and are looking to community college graduates to meet those needs.

Technical Programs

Technical Programs

Students train in state-of-the-art process laboratory facilities similar to area refining and chemical plant environments. The College facility was built in cooperation with area petrochemical companies. San Jacinto College works closely with industry as a member of the Gulf Coast Process Technology Alliance to maintain a curricula reflecting current technology standards.

Completion of the process technology curriculum can provide students with the technical skills required for entry-level positions as process technicians in petrochemical and related industries.

A certificate in process technology is still accepted by most of industry; however, several industries have indicated they will hire only graduates with the associate of applied science degree. Future trends indicate that most of the petrochemical industry technicians will be required to have an A.A.S. degree. Students who earn qualifications to be in the chemical lab technician specialty A.A.S. degree program have the advantage of earning qualifications for being hired into either the operations division or laboratory department of a process plant.

Process Technology (3PROT)

Associate of Applied Science Degree

Central Campus

First Term	Credit
PTAC 1302–Introduction to Process Technology	3
PTAC 1308–Safety, Health, and Environment I.....	3
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
SPCH 1318–Interpersonal Communications or SPCH 1321–Business and Professional Speech	3
PHED Activity	1
	16
Second Term	Credit
PTAC 1410–Process Technology I–Equipment.....	4
PTAC 1332–Process Instrumentation I	3
SCIT 1414–Applied General Chemistry I.....	4
ENGL 1301–Composition I	3
ELPT 1311–Basic Electricity Theory	3
PHED Activity	1
	18

Third Term	Credit
PTAC 2420–Process Technology II–Systems	4
PTAC 2314–Principles of Quality	3
PTAC 2336–Process Instrumentation II.....	3
CTEC 1401–Applied Petrochemical Technology	4
ENGL 1302–Composition II or ENGL 2311–Technical Report Writing.....	3
	17

Fourth Term	Credit
PTAC 2438–Process Technology III–Operations	4
PTAC 2446–Process Troubleshooting	4
CTEC 2386–Internship Chemical Technology/Technician or INTC 1355–Unit Operations or QCTC 1341–Statistical Process Control or HRPO 1311–Human Relations or PTRT 1301–Introduction to Petroleum Industry or EPCT 1341–Principles of Industrial Hygiene.....	3
*Humanities or Fine Arts	3
*Behavioral or Social Science	3
	17
Associate of Applied Science Degree Total	68

Verification of workplace competencies.

Capstone Experience: PTAC 2438

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Process Technology (4PROT)

Certificate of Technology

Central Campus

First Term	Credit
PTAC 1302–Introduction to Process Technology	3
PTAC 1308–Safety, Health, and Environment I.....	3
PTAC 1410–Process Technology I–Equipment.....	4
SCIT 1414–Applied General Chemistry I.....	4
PTAC 2314–Principles of Quality	3
	17
Second Term	Credit
CTEC 1401–Applied Petrochemical Technology	4
PTAC 1332–Process Instrumentation I	3
PTAC 2420–Process Technology II–Systems	4
PTAC 2438–Process Technology III–Operations	4
PTAC 2446–Process Troubleshooting	4
	19
Certificate of Technology Total	36

Verification of workplace competencies.

Capstone Experience: PTAC 2438

Technical Programs

Chemical Lab Technician Specialty (3PROT-CHM)

Associate of Applied Science Degree

Central Campus

First Term	Credit
PTAC 1302–Introduction to Process Technology	3
PTAC 1308–Safety Health and Environment I	3
PTAC 2446–Process Troubleshooting	4
CHEM 1411–General Inorganic Chemistry I.....	4
MATH 1333–Contemporary Mathematics or MATH 1314 College Algebra	3
	17

Second Term	Credit
CHEM 1412–General Inorganic Chemistry II.....	4
PTAC 1410–Process Technology I - Equipment	4
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
*Humanities or Fine Arts	3
PTAC 1332–Process Instrumentation I	3
PHED Activity	1
	18

Third Term	Credit
PTAC 2420–Process Technology II–Systems	4
CHEM 2423–Organic Chemistry I.....	4
ENGL 1301–Composition I	3
PTAC 2314–Principles of Quality	3
*Behavioral or Social Science	3
PHED Activity	1
	18

Fourth Term	Credit
CTEC 2386–Internship - Chemical Technology/Technician or HRPO 1311–Human Relations or PTRT 1301–Overview of Petroleum Industry or BMGT 1301–Supervision	3
PTAC 2438–Process Technology III - Operations.....	4
CHEM 2425–Organic Chemistry II.....	4
ENGL 1302–Composition II or ENGL 2311–Technical Report Writing.....	3
SPCH 1318–Interpersonal Communications or SPCH 1321–Business and Professional Speech	3
	17

Associate of Applied Science Degree Total 70

Verification of workplace competencies.

Capstone Experience: PTAC 2438

Approved Electives

BMGT 1301 HRPO 1311 PTRT 1301

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Real Estate

Real Estate (3REAL)

Associate of Applied Science Degree

All Campuses

This two-year program leading to an associate of applied science degree is for students who want to earn a two-year degree while preparing for jobs in real estate and for sales or broker licensure. Students pursuing a bachelor's degree should see a counselor or the associate dean prior to registration.

First Term	Credit
RELE 1201–Principles of Real Estate I.....	2
RELE 1238–Principles of Real Estate II.....	2
RELE 2301–Law of Agency	3
RELE 1311–Law of Contracts.....	3
RELE 1319–Real Estate Finance	3
RELE 1325–Real Estate Mathematics	3
	16

Second Term	Credit
BCIS 1305–Business Computer Applications or ITSC 1309–Integrated Software Applications I	3
MRKG 2333–Principles of Selling.....	3
RELE 1303–Real Estate Appraisal	3
RELE 1321–Real Estate Marketing.....	3
RELE 2366–Practicum–Real Estate.....	3
PHED Activity	1
	16

Third Term	Credit
BUSI 2301–Business Law I or RELE 1309–Real Estate Law.....	3
ENGL 1301–Composition I	3
RELE 2331–Real Estate Brokerage.....	3
RELE 1307–Real Estate Investment	3
SPCH 1315–Public Speaking or SPCH 1321–Business and Professional Speech	3
PHED Activity	1
	16

Technical Programs

Real Estate (6REAL)

Occupational Certificate

All Campuses

This certificate is designed to enable students to gain the knowledge and credentials necessary to take the salesperson's licensure examination. All the courses required for this certificate also apply toward the certificate of technology and the associate of applied science degree.

First Term

Credit

RELE 1201—Principles of Real Estate I.....	2
RELE 1238—Principles of Real Estate II.....	2
RELE 2301—Law of Agency	3
RELE 1311—Law of Contracts.....	3
RELE 1319—Real Estate Finance	3
RELE 1325—Real Estate Mathematics or RELE 1303 Real Estate Appraisal or RELE 1307 Real Estate Investments or RELE 1309 Real Estate Law or RELE 1321 Real Estate Marketing or RELE 2331 Real Estate Brokerage	3

Occupational Certificate Total

16

Capstone Experience: RELE 1311

Sales Requirements (after Sept. 1, 1994; amended Jan. 1, 2002; amended Jan. 1, 2006): 14 semester hours. Amended Jan. 1, 2008.

A minimum of 10 semester hours (150 classroom hours) must be completed in specific core real estate courses. These core courses must be Principles of Real Estate I and II, Law of Agency, and Law of Contracts.

The remaining two semester hours shall be completed in core real estate or related courses.

Requirements for Texas Real Estate Licensure are subject to change by the Texas Real Estate Commission. Three semester credit hours are the equivalent of 45 clock or classroom hours.

A real estate salesperson is required to complete a total of 18 semester (270 classroom) hours of education, at least 14 semester (210 classroom) hours of which must be core courses, by the end of their first year of licensure. This education is referred to as Salesperson Annual Education (SAE), as it is required for the first Salesperson renewal. Note that the hours for the SAE may be completed at any time. However, the hours must be submitted on the TREC System within the renewal intervals. Once the SAE requirements have been satisfied, the Salesperson is required to complete Mandatory Continuing Education (MCE) for each renewal period.

Courses acceptable toward sales educational requirements are also acceptable for broker educational requirements.

Fourth Term	Credit
ACCT 2301—Accounting Principles I or ACNT 1303—Introduction to Accounting I.....	3
*Behavioral or Social Science	3
ENGL 1302 English Composition II or ENGL 2311—Technical Report Writing.....	3
RELE 2367—Practicum—Real Estate.....	3
MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3
*Humanities or Fine Arts	3
	18
Associate of Applied Science Degree Total	66

Capstone Experience: RELE 2367

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core Curriculum.

Real Estate (4REAL)

Certificate of Technology

All Campuses

The certificate of technology builds on the occupational certificate by including courses that provide for the annual renewal of the salesperson's license and better equip the student to be successful in the highly competitive field of real estate. All courses required for this certificate also apply toward the associate of applied science degree.

First Term	Credit
RELE 1201—Principles of Real Estate I.....	2
RELE 1238—Principles of Real Estate II.....	2
RELE 1311—Law of Contracts.....	3
RELE 1319—Real Estate Finance	3
RELE 1325—Real Estate Mathematics	3
RELE 2301—Law of Agency	3
	16

Second Term

Credit

BCIS 1305—Business Computer Applications or ITSC 1309—Integrated Software Application I.....	3
MRKG 2333—Principles of Selling.....	3
RELE 1321—Real Estate Marketing.....	3
RELE 1303—Real Estate Appraisal or RELE 1307—Real Estate Investments or RELE 1309—Real Estate Law or RELE 2331 Real Estate Brokerage	3
RELE 2366—Practicum—Real Estate or RELE 2367—Practicum—Real Estate	3
	15

Certificate of Technology Total

31

Capstone Experience: RELE 2366 or RELE 2367

Technical Programs

To be licensed as a broker under the educational requirements after Jan. 1, 2002, 18 semester hours (270 classroom hours) of the 60 semester hours (900 classroom hours) must be in core real estate courses. An applicant must have taken a real estate brokerage class.

Also, at least two years active experience in Texas as a licensed real estate salesperson are required during the 36-month period immediately preceding the filing of the application.

For further information write or call: The Texas Real Estate Commission, P.O. Box 12188, Capitol Station, Austin, TX 78711; 512.465.3940, or 800.250.8732.

Core Real Estate Courses

RELE 1201	RELE 1238	RELE 1303
RELE 1307	RELE 1309	RELE 1311
RELE 1319	RELE 1321	RELE 1325
RELE 2301	RELE 2331	

Related Courses Acceptable Toward Sales or Broker Licensure Only (Subject to change by TREC)

ACNT 1303	ACNT 1304	ACCT 2301
ACCT 2302	ACNT 2303	ACNT 2304
AIRC 1401	AIRC 1411	BMGT 1301
BUSG 2309	BUSG 2317	BUSI 1301
BUSI 1304	BUSI 1311	BUSI 2301
BUSI 2304	CONT 1314	CONT 1415
CONT 1511	CONT 1512	CONT 1514
CONT 2311	CONT 2313	CONT 2413
CONT 2511	DFTG 2428	DFTG 1417
DFTG 2444	ECON 2301	ECON 3202
ELPT 1311	ELPT 1325	ELPT 2325
ELPT 1351	ELPT 2305	ELPT 1429
ENGL 0306	ENGL 1111	ENGL 1301
ENGL 1302	ENGL 1303	ENGL 1304
ENGL 2311	GOVT 2302	HRPO 1311
INTD 1416	ITSC 1301	MATH 0304
MATH 0305	MATH 0306	MATH 1314
MATH 1332	MATH 1335	MATH 1336
PSYC 2301	PSYC 2316	SPCH 1318
SPCH 1321	MATH 1333	

Related Courses Acceptable Toward Broker Licensure Only (Subject to change by TREC)

ACNT 2309	ACNT 1321	ACNT 1329
ACNT 1311	ANTH 2351	ARTS 2351
ARTS 2352	ARTS 2373	ARTS 2374
BMGT 1301	BMGT 1331	BMGT 2368
COMM 1307	COMM 2311	COMM 2315
COMM 2327	CONT 2314	CONT 2412
CONT 2513	CONT 2514	CONT 2515
CONT 2516	CONT 2517	CONT 2518
COSC 1318	COSC 2318	COSC 2325
COSC 2370	DFTG 1417	DFTG 1448
DFTG 2428	DFTG 2410	DFTG 2416
EDTC 1341	ELPT 2337	ELPT 2343
ENGR 2304	HIST 1301	HIST 1302

HIST 2301	INTD 2416	ITNW 1392
ITNW 2305	ITNW 2331	ITNW 2347
ITSC 1391	ITSE 2335	ITSE 1305
ITSE 1307	ITSE 1309	ITSE 1310
ITSE 1318	ITSE 1329	ITSE 1331
ITSE 1391	ITSE 2349	ITSW 2334
ITSW 2336	ITSW 2337	MATH 1316
MATH 1324	MATH 1325	MATH 1342
MATH 2312	MATH 2315	MATH 2318
MATH 2320	MATH 2413	MATH 2414
MRKG 1311	PHIL 2303	POFI 1301
POFI 1325	POFI 1341	POFI 1349
POFI 2301	POFL 1305	POFM 1313
POFT 1309	POFT 1319	POFT 1325
POFT 1329	POFT 2301	PSYC 2317
RELE 2367	SOCI 1301	SOCI 1306
SPAN 1412	SPAN 2311	SPAN 2312

Respiratory Care

Central Campus

**A criminal background check and/or drug screening is required for all health science students attending clinical courses, or practicum/ and may be required prior to admission to the program.*

The department of respiratory care offers an associate of applied science degree program. Graduates are qualified to apply to take the examination for entry-level certified respiratory therapist as well as the advanced Registered Respiratory Therapist examination administered by the National Board for Respiratory Care.

Due to the limited number of clinical spaces, students are admitted on a competitive basis. All candidates must be counseled by the department of respiratory care at San Jacinto College.

Philosophy

The philosophy of the department of respiratory care adheres to the philosophy of San Jacinto College. Respiratory care is the allied health discipline that provides care through the use of diagnostic testing to patients with abnormalities of the cardiopulmonary systems. Respiratory therapists practice their specialty under the direction of licensed physicians and perform their duties in a variety of settings, including intensive care units, neonatal/pediatric special care units, general hospital wards, emergency/trauma units, extended care facilities and the home.

Due to the nature of the services provided, respiratory therapists must be able to apply knowledge gained through academic education to clinical problems and rationally care for the patient. Graduates of the programs offered by the department of respiratory care are prepared as contributing members of the health care team.

Technical Programs

Objectives

Upon completion of the program offered by the department of respiratory care, the student should be able to:

1. Utilize patient care processes and scientific principles to provide respiratory care to patients in health care facilities.
2. Participate as a contributing member of the health care team.
3. Assume personal responsibility for continued learning in order to maintain professional competency and promote the advancement of the field of respiratory therapy.
4. Successfully complete the credentialing examinations administered by the National Board for Respiratory Care.

Program Admission Criteria

Students who apply for admission to the department of respiratory care will be selected on the basis of their coursework completed and their grade point average at San Jacinto College.

Applicants must complete 10 semester hours as specified below with at least a B average in the three courses and no grade lower than C prior to being accepted in the program.

BIOL 2401 or BIOL 2402, and

ENGL 1301 or ENGL 1302, and

MATH 1314 or MATH 1333

Students must apply for admission to the department of respiratory care by submitting a formal application and all required official documents to the Office of Enrollment Services.

Applicants must meet all College general admission requirements. After acceptance into the program, an applicant must have a physical examination by a licensed physician and documentation of updated immunizations. Respiratory care students must earn a grade of C or better in all respiratory care (RSPT) courses, science and mathematics courses, and must maintain an overall grade point average of at least 2.0 in order to graduate from the respiratory care program.

If the student earns a grade of D, W or F in a respiratory care course, the student will be required to repeat the course in which the unsatisfactory grade was earned and pass that course with a grade of C or better in order to progress in the program. A second earned grade of D, W or F in a respiratory care course will result in the student's being dismissed from the program. To re-enter the program the student must submit a written petition to the Respiratory Care Admission Committee and satisfy the readmission criteria specified by the Committee.

All students should take the required academic foundation courses in sequence along with professional coursework.

Applicants to the department of respiratory care will be notified by mail regarding their program admission status. Applicants who are not selected for admission to the respiratory care program may re-apply. Applicants who are accepted for admission into the department of respiratory care, but who do not enroll, must re-apply to be considered for admission at a later date.

A student currently on academic probation is ineligible to enroll in the respiratory care program.

Application Periods:

- Jan. 1 through June 1
- Sept. 1 through Nov. 1

Classes begin each Fall and Spring term. For more information please contact the respiratory care department at 281.998.6150, ext. 1864.

Respiratory Care (3RESP)

Associate of Applied Science Degree

Central Campus

Pre-requisite	Credit
BIOL 2401–Human Anatomy and Physiology I.....	4
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
ENGL 1301–Composition I	3
	10
First Term	Credit
HPRS 1106–Medical Terminology Essentials.....	1
RSPT 1325–Respiratory Care Sciences.....	3
RSPT 1340–Advanced Cardiopulmonary Anatomy and Physiology	3
RSPT 1429–Respiratory Care Fundamentals 1	4
BIOL 2402–Human Anatomy and Physiology II	4
PHED Activity	1
	16
Second Term	Credit
RSPT 1267–Respiratory Care Practicum I	2
RSPT 2310–Cardiopulmonary Disease.....	3
RSPT 2317–Respiratory Care Pharmacology.....	3
RSPT 1431–Respiratory Care Fundamentals II	4
	12
PostY1Summer	Credit
RSPT 2355–Critical Care Monitoring	3
RSPT 2167–Respiratory Care Practicum II	1
RSPT 2314–Mechanical Ventilation.....	3
	7

Technical Programs

Third Term	Credit
RSPT 2266–Respiratory Care Practicum III.....	2
RSPT 2353–Neonatal/Pediatric Cardiopulmonary Care.....	3
ENGL 1302–Composition II or ENGL 2311–Technical Report Writing.....	3
BIOL 2420–Microbiology and Pathology.....	4
Physical Education.....	3

15

Fourth Term	Credit
RSPT 2267–Respiratory Care Practicum IV.....	2
RSPT 2258–Advanced Respiratory Care Patient Assessment.....	2
RSPT 2130–Respiratory Care Examination Preparation.....	1
PSYC 2301–General Psychology.....	3
Speech.....	3
**Humanities or Fine Arts.....	3

14

Associate of Applied Science Degree Total 72

Capstone Experience: RSPT 2258

* Students desiring to obtain a baccalaureate degree should take MATH 1314–College Algebra.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

For further information concerning respiratory care accreditation, write or call:

CoARC, 1248 Harwood Rd., Bedford, Texas 76021-4244,
817.283.2835 or visit <http://www.coarc.com/>.

Restaurant Management

Restaurant Management (3CULA-RSTR)

Associate of Applied Science Degree

Central Campus

The restaurant management program provides training that will qualify graduates for supervisory positions in commercial food service. Courses are structured to cover the various operations of restaurants, hotel food service, cafeterias, coffee shops, catering and other areas of food service specialty.

First Term	Credit
CHEF 1305–Sanitation and Safety.....	3
RSTO 1325–Purchasing for Hospitality Operations.....	3
CHEF 1313–Food Service Operation/Systems.....	3
CHEF 1401–Basic Food Preparation.....	4
IFWA 1318–Nutrition for the Food Service Professional or HECO 1322–Nutrition and Diet Therapy.....	3
PHED Activity.....	1

17

Second Term	Credit
RSTO 1313–Hospitality Supervision.....	3
RSTO 2405–Management of Food Production and Service.....	4
Approved Elective.....	4
*MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra.....	3
PHED Activity.....	1

15

Third Term	Credit
RSTO 1301–Beverage Management.....	3
RSTO 2301–Principles of Food and Beverage Controls.....	3
ACCT 2301–Accounting Principles I.....	3
ENGL 1301–Composition I.....	3
Approved Elective.....	3

15

Fourth Term	Credit
**Behavioral or Social Science.....	3
Speech.....	3
**Humanities or Fine Arts.....	3
Approved Elective.....	4
CHEF 2365 Practicum (or Field Experience) - Culinary Arts/Chef Training or RSTO 2365 Practicum - Restaurant, Culinary, and Catering Management/Manager.....	3

16

Associate of Applied Science Degree Total 63

Capstone Experience: CHEF 2365 or RSTO 2365

* College preparatory courses (those courses which have numbers beginning with 0) do not apply toward the associate degree.

** Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.

Approved Electives		
CHEF 1345	CHEF 2365	CHEF 2402
IFWA 1305	IFWA 2441	PSTR 1401
PSTR 2431		

Restaurant Management (4CULA-RSTR)

Certificate of Technology

Central Campus

First Term	Credit
CHEF 1305–Sanitation Safety.....	3
RSTO 1325–Purchasing for Hospitality Operations.....	3
CHEF 1313–Food Service Operation Systems.....	3
CHEF 1401–Basic Food Preparation.....	4
IFWA 1318–Nutrition for the Food Service Professional or HECO 1322–Nutrition and Diet Therapy.....	3

Technical Programs

Students earning a grade of D, W or F in any surgical technology course will be required to repeat the surgical technology course in which the unsatisfactory grade was earned and pass the course with a grade of C or better to progress in the program.

In subsequent terms, should a second grade of D, W or F be earned in any surgical technology course, even though the student may have repeated the course in which the first grade of D, W or F was earned and received, the student will be dismissed from the surgical technology program.

Students are required to purchase uniforms and accessories specified by the department of surgical technology. Each student is responsible for his/her own transportation to the clinical areas. Each student who registers for surgical technology courses is required to purchase student liability insurance.

Philosophy

The philosophy of the department of surgical technology parallels the philosophy of San Jacinto College. The surgical technologists are integral parts of the surgical team who work closely with nurses and surgeons to provide the best possible care for the patient during the intraoperative phase of a surgical procedure. Surgical technologists are responsible for assisting surgeon during surgery by passing instruments and other equipment to the surgeon in a prescribed manner and assisting to maintain sterility throughout the entire procedure.

Surgical Technology (3SURT)

Associate of Applied Science Degree

(Pending approval by The Texas Higher Education Coordinating Board)

Central Campus

Pre-requisite	Credit
SRGT 1201–Medical Terminology	2
	2

First Term	Credit
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SRGT 1471–Anatomy and Physiology for Surgical Technology	4
SRGT 1260–Clinical–Surgical Technology/Technologist.....	2
SRGT 1505–Introduction to Surgical Technology	5
SRGT 1509–Fundamental of Perioperative Concepts and Techniques	5
	16

Second Term	Credit
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SRGT 1360–Clinical–Surgical Technology/Technologist.....	3
SRGT 1541–Surgical Procedures I	5
HPRS 2200–Pharmacology for Health Professions	2
HPRS 2301–Pathophysiology	3
	13

Second Term	Credit
RSTO 1313–Hospitality Supervision	3
RSTO 2405–Management of Food Production and Service.....	4
RSTO 1301–Beverage Management	3
RSTO 2301–Principles of Food and Beverage Controls.....	3
RSTO 2365–Practicum (Field Experience)-Restaurant, Culinary, and Catering Management/Manager.....	3
	16
Third Term	Credit
Approved Electives	10
	10
Certificate of Technology Total	42
Capstone Experience: CHEF 2365 or RSTO 2365	
Approved Electives	
CHEF 1345 CHEF 2365 CHEF 2402	
IFWA 1305 IFWA 2441 PSTR 1401	
PSTR 2431	

Surgical Technology

A criminal background check and/or drug screening is required for all health science students attending clinical courses, or practicum, and may be required prior to admission to the program.

The surgical technology program is accredited by the Commission for Accreditation for Allied Health Education Programs (CAAHEP) effective until 2015, in conjunction with the Accreditation Review Committee on Education in Surgical Technology (ARC-ST). Upon completion of the program, the student is granted a certificate of technology and is eligible to apply for the National Certification Examination given by the Association of Surgical Technologists.

The program curriculum is a balance of theoretical and technical courses with supervised clinical practicums at area hospitals, as well as the Texas Medical Center. The combination provides the student an opportunity for educational development and skill competency.

Applicants must meet the College’s general admission requirements and successful completion of SRGT 1201. Permission must be obtained from the department chair in order to enroll in SRGT 1201, Medical Terminology, prerequisite course. After acceptance into the program, an applicant must have a physical examination by a licensed physician (M.D., D.O.) and complete documentation of updated immunization, including the series of the Hepatitis B vaccine. All students must process through a criminal/drug background check.

Surgical technology students must earn a grade of C or above in all surgical technology courses and maintain an overall cumulative grade point average of at least 2.0 in order to graduate from the surgical technology program.

Technical Programs

PostY1 Summer	Credit
SRGT 2130—Professional Readiness	1
SRGT 1261—Clinical—Surgical Technology/Technologist.....	2
SRGT 1542—Surgical Procedures II	5
	8

Third Term	Credit
MATH 1333—Contemporary Mathematics or MATH 1314—College Algebra	3
ENGL 1301—Composition I	3
PHED Activity	1
Speech	3
PSYC 2301—General Psychology	3
	13

Fourth Term	Credit
ENGL 1302—Composition II or ENGL 2311—Technical Report Writing.....	3
PHED Activity	1
*Humanities or Fine Arts	3
Free Elective.....	3
	10

Associate of Applied Science Degree Total **62**

Capstone Experience: SRGT 1542 and SRGT 1261.
VERIFICATION OF WORKPLACE COMPETENCIES.

**Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts section of the Transfer Core Curriculum.*

Surgical Technology (4SURT)

Certificate of Technology

First Term	Credit
SRGT 1471—Anatomy and Physiology for Surgical Technology	4
SRGT 1201—Medical Terminology	2
SRGT 1260—Clinical I Surgical.....	2
SRGT 1509—Fund Periop Concepts/Technqs.....	5
SRGT 1505—Introduction of Surgical Technology	5
	18

Second Term	Credit
SRGT 1360—Clinical II—Surgical.....	3
SRGT 1541—Surgical Procedures I	5
HPRS 2301—Pathophysiology	3
HPRS 2200—Pharmacology for Health Professions	2
	13

Third Term	Credit
SRGT 2130—Professional Readiness	3
SRGT 1261—Clinical III—Surgical.....	2
SRGT 1542—Surgical Procedures II	5
	9

Certificate of Technology Total **39**

Capstone Experience: SRGT 1542 and SRGT 1261.

Upon completion of the program the student receives a certificate of technology and is eligible to write the National Certification Examination to become a certified surgical technologist.

Truck Driving (Commercial)

Central Campus

Continuing Education

Admission Requirements

Applicants for the San Jacinto College commercial truck driving courses must:

- Be at least 18 years of age and pass a mandatory drug test.
- Be in reasonably good physical condition and have no serious physical handicaps. (For guidelines, please read the Federal Motor Carrier Safety Regulations and Noise Emission Requirements, Chapter III—Federal Highway Administration, Department of Transportation—Subpart E—Physical Qualifications and Examinations—391.41)
- If born outside the U.S. or a graduate of a high school outside the U.S., all applicants must be able to provide adequate proof of competency in English or pass the English Proficiency Test administered by the Testing Center at the College. For appointments with the Testing Center, call 281.476.2025.
- If enrolling with an F-1 Visa, must be certified for English competency and be approved by the International Student Advisor, located in room 156 in the Administration Building. For appointments with the Advisor, call 281.476.1840.
- Have a valid Texas driver's license.
- Have a valid Social Security number.

Course Information

Day classes meet Monday through Thursday from 7 a.m. until 6 p.m. for six weeks. Weekend classes meet Saturdays and Sundays from 7 a.m. until 6 p.m. for 12 weeks. Each student will log approximately 800 miles of actual behind-the-wheel driving, pulling empty and loaded trailers. Total truck maintenance and safety, Department of Transportation Federal Motor Carrier Safety Regulations, and driving courtesies are covered. The commercial truck driving curriculum is designed to provide basic training in preparation for employment as a professional truck driver. A continuing education six-hour defensive driving course is also included.

Technical Programs

Upon successful completion of the prescribed course work, students receive an occupational certificate and a Department of Transportation certification. These non-credit courses are approved for Veterans Administration educational assistance. Job assistance is available to qualified students through the commercial truck driving department.

Registration and Fees

Registration is handled on a first-come, first-served basis. It is recommended that any interested students register early in order to guarantee a place in the class. Payment of the total cost of both courses is due upon registration. Students are asked to contact the department chair for the most recent costs. (Tuition, fees and contact hours are subject to change without notice.) For more information, call 281.476.1872.

Truck Driving (Commercial)

Occupational Certificate (Continuing Education)

First Course	Contact Hours
CVOP 1013–Professional Truck Driving I	126

Second Course

CVOP 1040–Professional Truck Driving II.....	120
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Occupational Certificate Total	246
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Capstone Experience: DOT Written and Driving Examination

* Commercial truck driving courses are offered through the cooperation of the Industrial Technology Division and the Continuing Education Office. Students who successfully complete the above course(s) will receive credit in Continuing Education Units (CEUs) equal to 1.0 CEU per 10 contact hours in class.

Visual Communication

Visual Communication (3VCOM)

Associate of Applied Science Degree

South Campus

The visual communication curriculum is designed to provide basic preparation for entry-level employment in visual (advertising/graphic/media) communication. The program will develop basic skills; electives will enable the student to specialize in a specific area of visual communication.

First Term	Credit
ENGL 1301–Composition I	3
ARTS 1311–Design I.....	3
ARTS 1316–Drawing I.....	3
PHED Activity	1
ARTS 2313 Design Communication I or ARTC 1317 Design Communication I	3
ARTS 2348 Digital Art I or ARTC 1325 Introduction to Computer Graphics	3

16

Second Term

Credit

ARTS 1312–Design II	3
ARTS 1317–Drawing II.....	3
ARTS 1303–Art History I	3
ENGL 1302–Composition II	3
PHED Activity	1
ARTS 2314–Design Communication II or ARTC 2347–Design Communication II	3

16

PostY1Summer

Credit

ARTS 1304–Art History II	3
*Social or Behavioral Science	3

6

Third Term

Credit

ARTC 1327–Typography	3
Approved Elective	3
IMED 1301–Introduction to Digital Media or ARTV 1351–Digital Video	3
**MATH 1333–Contemporary Mathematics or MATH 1314–College Algebra	3
ARTS 2349–Digital Art II or ARTC 1302–Digital Imaging I.....	3

15

Fourth Term

Credit

SPCH 1321–Business and Professional Speech	3
ARTC 1321–Illustration Techniques I.....	3
IMED 1316–Web Design I	3
Approved Elective	3
ARTC 2366 Practicum (or Field Experience) - Commercial and Advertising Art or ARTC 2335 Portfolio Development for Graphic Design.....	3

15

Associate of Applied Science Degree Total

68

Capstone Experience: ARTC 2366 or 2335

Approved Electives

ARTC 1353	ARTS 2316	ARTS 2317
ARTS 2323	ARTS 2324	ARTS 2326
ARTS 2327	ARTS 2333	ARTS 2334
ARTS 2341	ARTS 2342	ARTS 2356
ARTS 2357	ARTS 2366	ARTS 2367
ARTV 1303	ARTV 1341	ARTV 1345
ARTV 1351	ARTV 2301	ARTV 2341
BGMT 1303	DFTG 1413	IMED 2315
IMED 2345	MRKG 1311	PHTC 1311
PHTC 2301		

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core curriculum.

** College preparatory courses (those courses which have numbers beginning with 0) do not apply toward the associate degree. Technical courses do not transfer to a senior institution. See an art department counselor for information.

Technical Programs

Visual Communication (4VCOM)

Certificate of Technology

South Campus

This certificate of technology is designed to meet the needs of students who desire to enter the graphic arts field in a minimum amount of time. All courses required for the visual communication certificate of technology may be used in completing the Visual Communication Associate of Applied Science.

First Term	Credit
ARTS 1311–Design I.....	3
ARTS 1316–Drawing I.....	3
ARTS 1301 Art Appreciation or ARTS 1303 Art History I or ARTS 1304 Art History II	3
ARTS 2348 Digital Art I or ARTC 1325 Introduction to Computer Graphics	3
ARTS 2313 Design Communication I or ARTC 1317 Design Communication I	3
	15
Second Term	Credit
ARTS 1312–Design II	3
ARTS 1317–Drawing II.....	3
ARTS 2314–Design Communication II or ARTC 2347–Design Communication II	3
	9
Third Term	Credit
IMED 1301 Introduction to Digital Media or ARTV 1351 Digital Video	3
ARTS 2349 Digital Art II or ARTC 1302 Digital Imaging I.....	3
	6
Fourth Term	Credit
ARTC 2366 Practicum (or Field Experience) - Commerical and Advertising Art or ARTC 2335 Portfolio Development for Graphic Design.....	3
	3
Certificate of Technology Total	33
Capstone Experience: ARTC 2366 or ARTC 2335	

Digital Media/Computer Animation (4VCDM)

Certificate of Technology

South Campus

Students desiring skill and knowledge in the specialized area of digital media/computer animation enter the more advanced electronic portion of the visual communication field. Students must successfully complete the specified courses with a grade of C or better. Students must meet course prerequisites or be approved by the department chair.

Pre-requisite	Credit
ARTC 1325–Introduction to Computer Graphics	3
	3
First Term	Credit
IMED 1301–Introduction to Multimedia	3
ARTV 1303–Basic Animation.....	3
ARTV 1351–Digital Video	3
ARTV 1345–3-D Modeling and Rendering I	3
	12
Second Term	Credit
IMED 2345–Interactive Digital Media II.....	3
ARTV 2301–2-D Animation I	3
ARTV 2341–Advanced Digital Video	3
ARTV 1341–3-D Animation I	3
	12
PostY1Summer	Credit
ARTV 2351–3-D Animation II.....	3
ARTC 2366–Practicum (or Field Experience) - Commerical and Advertising Art.....	3
	6
Certificate of Technology Total	30
Capstone Experience: ARTC 2366	

Welding Technology

The growing demand for qualified welders has necessitated the availability of a curriculum designed to meet the needs of the welding industry. Students graduating from the program will have the skills and a good understanding of the related and technical information associated with welding. Graduates should be qualified to pass the entry-level certification tests as required by industry. Students completing the program outlined below will earn an associate of applied science degree.

The curriculum focuses on the introductory, advanced and high-technology welding skills required in manufacturing, industry and in research.

Welding Technology (3WLD)

Associate of Applied Science Degree

Central and North Campuses

First Term	Credit
PHED Activity	1
WLDG 1528—Introduction to Shielded Metal Arc Welding (SMAW)....	5
WLDG 1530—Introduction to Gas Metal Arc Welding (GMAW).....	5
Speech	3
MATH 1333—Contemporary Mathematics or MATH 1314 College Algebra	3
	17
Second Term	Credit
WLDG 1534—Introduction to Gas Tungsten Arc (GTAW) Welding	5
WLDG 2543—Advanced Shielded Metal Arc Welding (SMAW)	5
ENGL 1301—Composition I	3
*Humanities or Fine Arts	3
	16
Third Term	Credit
WLDG 1535—Introduction to Pipe Welding	5
WLDG 2551—Advanced Gas Tungsten Arc Welding (GTAW)	5
ENGL 2311—Technical Report Writing or ENGL 1302—Composition II	3
BCIS 1305 Business Computer Applications or ITSC 1309 Integrated Software Applications I	3
	16
Fourth Term	Credit
WLDG 2553—Advanced Pipe Welding	5
*Behavioral or Social Science	3
WLDG 2571—Advanced Gas Tungsten Arc (GTAW) Welding Stainless Steel or WLDG 2580—Cooperative Education Welding	5
PHED Activity	1
	14
Associate of Applied Science Degree Total	63

Capstone Experience: WLDG 2571 or WLDG 2580

* Courses which satisfy this requirement are listed in the Humanities and Visual/Performing Arts and Behavioral and Social Sciences sections of the Transfer Core curriculum.

Technical Programs

Combination Welder (4WLD-C)

Certificate of Technology

Central and North Campuses

The Combination Welder Certificate of Technology is designed to give intermediate and advanced welding experience to those students interested in taking Shielded Metal Arc (SMAW) Welding and Gas Tungsten Arc (GTAW) Welding on plate and pipe to meet certification tests required by industry. Instruction is provided on plate and pipe welding positions on carbon steel.

First Term	Credit
WLDG 1528—Introduction to Shielded Metal Arc Welding (SMAW)....	5
WLDG 1535—Introduction to Pipe Welding	5
WLDG 2543—Advanced Shielded Metal Arc Welding (SMAW)	5
WLDG 2553—Advanced Pipe Welding	5
WLDG 1534—Introduction to Gas Tungsten Arc Welding (GTAW)	5
WLDG 2551—Advanced Gas Tungsten Arc Welding (GTAW)	5
Certificate of Technology Total	30
Capstone Experience: WLDG 2551	

Gas Shielded Welding (4WLD-GAS)

Certificate of Technology

Central and North Campuses

The Gas Shielded Welding Certificate of Technology is designed to give entry-level welding experience to those students interested in taking Gas Metal Arc (GMAW) and Gas Tungsten Arc (GTAW) plate and pipe welding certification tests as required by industry. Instruction is provided on plate and pipe welding positions on carbon steel.

First Term	Credit
WLDG 1530—Introduction to Gas Metal Arc Welding (GMAW)	5
WLDG 1534—Introduction to Gas Tungsten Arc (GTAW) Welding	5
WLDG 2551—Advanced Gas Tungsten Arc Welding (GTAW)	5
WLDG 2571—Advanced Gas Tungsten Arc Welding - Stainless Steel (GTAW)	5
Approved Elective	4–5
Certificate of Technology Total	24–25
Capstone Experience: WLDG 2571	

Approved Electives		
DFTG 1405	DFTG 2417	NDTE 1410
METL 1405	METL 2435	WLDG 1528
WLDG 1535	WLDG 2543	WLDG 2553
WLDG 2580		

Technical Programs

Structural Welder (6WLD-STR)

Occupational Certificate

Central and North Campuses

The structure welder certificate provides students with entry-level skills for immediate employment. Courses focus on knowledge and skills required for Shielded Metal Arc Welding (SMAW) to prepare students to pass many structural welding tests as required by industry, fabrication companies, and shipyards. These courses may also be applied toward the Stick Pipe Welding Occupational Certificate, the Combination Welder Certificate of Technology and the Associate of Applied Science in Welding Technology.

First Term	Credit
WLDG 1528—Introduction to Shielded Metal Arc Welding (SMAW)....	5
WLDG 2543—Advanced Shielded Metal Arc Welding (SMAW)	5
WLDG 2580—Cooperative Education Welding or WLDG 1535—Introduction to Pipe Welding or WLDG 2553—Advance Pipe Welding or WLDG 1534—Introduction to Gas Tungsten Arc Welding (GTAW)	5
Occupational Certificate Total	15
Capstone Experience: WLDG 2580 or WLDG 1535 or WLDG 2553 or WLDG 1534	

Stick Pipe Welder (6WLD-STI)

Occupational Certificate

Central and North Campuses

This series of courses introduces the student to various aspects within the Shielded Metal Arc Welding (SMAW) of pipe according to common welding codes and procedures. Upon completion of this certificate, student should be successful at completing SMAW pipe weld tests as required by industry and fabrication companies. These courses may also be applied toward the combination pipe welder certificate of technology, and the Associate of Applied Science in Welding Technology.

First Term	Credit
WLDG 1528—Introduction to Shielded Metal Arc Welding (SMAW)....	5
WLDG 1535—Introduction to Pipe Welding	5
WLDG 2543—Advanced Shielded Metal Arc Welding (SMAW)	5
WLDG 2553—Advanced Pipe Welding	5
Occupational Certificate Total	20
Capstone Experience: WLDG 2553	

Combination Welding (CE-WLDG)

Continuing Education Certificate

Central and North Campuses

Contact Hours

WLDG 1028—Introduction to Shielded Metal Arc Welding (SMAW)	128
WLDG 1034—Introduction to Gas Tungsten Arc (GTAW) Welding ..	128
WLDG 1035—Introduction to Pipe Welding	128
WLDG 2043—Advanced Shielded Metal Arc Welding (SMAW)	128
WLDG 2051—Advanced Gas Tungsten Arc Welding (GTAW)	128
WLDG 2053—Advanced Pipe Welding	128

Certificate of Technology Total **768**

Capstone Experience: WLDG 2051

Sheet Metal Welder (CE-WLDSM)

Continuing Education Certificate

Continuing Education

North Campus

Contact Hours

MCHN 1001—Sheet Metal I.....	72
MCHN 1049—Sheet Metal II.....	72
MCHN 1071—Sheet Metal IIB.....	72
MCHN 1053—Sheet Metal III.....	72
MCHN 1072—Sheet Metal IIIB.....	72
MCHN 2030—Sheet Metal IV.....	72
MCHN 2071—Sheet Metal IVB.....	72

Certificate of Technology Total **504**

Capstone Experience: MCHN 2071