Mt. San Jacinto College

Career and Technical Education Catalog

MSJC

San Jacinto • Menifee Valley • San Gorgonio • Temecula

2014–2015

www.msjc.edu/cte

MSJC
MT. SAN JACINTO COLLEGE

STATE OF CALIFORNIA – INDUSTRY SECTORS

The State of California has identified fifteen industry sectors which each contain multiple career pathways in which to develop programs of study. Mt. San Jacinto College offers a variety of CTE programs in eleven of those industry sectors. Under each industry sector, students will find a brief industry sector overview, certificate and/or degree options, employment concentration certificate information (if available) and potential career opportunities. Choose your path — there is one for everyone!

Program Awards

Each of the programs highlighted in this catalog leads to some type of award or degree. Our programs offer Associate in Science Degree, Associate in Arts Degree, State Approved Certificates and/or Employment Concentration Certificates.

Associate in Science Degree: The Associate in Science Degree will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

Associate in Arts Degree: The Associate in Arts Degree will be awarded upon completion of the degree requirements, including general education and other graduation requirements as described in the college catalog.

Transfer Associate Degrees: California Community College students that have earned a transfer associate (A.A./A.S.-T) degree are guaranteed junior standing and priority admission consideration over all other transfer students when applying to a CSU baccalaureate (B.A./B.S.) degree program that has been deemed similar to the student's community college area of emphasis. Once admitted to a similar baccalaureate (B.A./B.S.) degree program, the transfer associate degree student will only be required to complete 60 additional prescribed units to qualify for the similar baccalaureate (B.A./B.S.) degree.

State Approved Certificate: These programs take 18 units or more to complete and may lead to an Associate in Science Degree.

Employment Concentration Certificates: These are locally awarded certificates that take 18 units or less to complete and may help an individual renew or update career skills, may lead to employment competency or salary advancement but do not lead to an Associate in Science Degree. They can be used as a stepping stone towards earning a State Approved Certificate or Associate in Science Degree.

Counseling

Students should always see a counselor to develop an educational plan. CTE Counseling is available by contacting the Counseling Office at one of our 4 locations:

San Jacinto Campus	**951-487-3255**
Menifee Valley Campus	**951-639-5255**
Temecula Education Complex	**951-693-5309**
San Gorgonio Pass Center	**951-922-1408**

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Joyce Johnson, RN, MSN
Dean, Career Technical Education

Dear Students,

Through the Career Technical Education (CTE) Department at Mt. San Jacinto College, we provide multiple educational pathways designed to provide both professional and technical skills essential for you to be competitive in today's job market. These options include Associates in Science degrees, Associate in Arts degrees; State approved certificate programs, occupational internships, and flexible training courses. CTE at Mt. San Jacinto College provides valuable training whether you are at the beginning of your educational journey, hoping to expand your professional skill-set or looking for an entirely new career.

Here at Mt. San Jacinto College our programs are developed in collaboration with our business and industry partners so they are responsive to today's ever-changing job market. It is the goal of CTE to provide high quality programs that effectively prepare students to enter occupations available in some of today's fastest growing industries or to transfer to four-year universities and continue their education. Programs are designed to be affordable and flexible, with courses offered in both traditional classroom settings, online, as well as during the day and at night. Our desire is for you to successfully reach your goals.

Choose your future — there is sure to be a path for you through CTE at Mt. San Jacinto College!

The mission of Career & Technical Education Programs at Mt. San Jacinto College is to engage, prepare, and educate learners, communities, and employees for careers in a global and competitive workforce.

Directors, Program Coordinators and Site Supervisors

Nancy Alvarado
Child Development
& Education

Matthew Leyden
CTE Counselor/
CWEE Coordinator

Susanne Mata
Career & Technical
Education

Teri Safranek
Continuing Education
& Workplace Training

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Lynn Mann
Business Education &
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Systems Departments

Deborah McKee
Career & Technical Education,
Special Programs

Kaye Melsheimer
Business Education &
Computer Information
Systems Departments

Niki Love
Multimedia Department

Melissa Ott
Photography Department

Vinson "Cody" Thorn
Automotive Technology

Certificates, Degrees and Employment Concentrations

Mt. San Jacinto College offers many degree programs as well as a vast array of state approved certificates and locally approved employment concentration certificates for eleven of the fifteen California Industry Sectors as shown in the following table. Please refer to the MSJC College Catalog for specific program requirements and course details. An "**X"** will be in the box indicating if employment concentration certificates, certificates or Associate's degrees are available for the different programs.

Program	Employment Concentration	Certificate	Degree
Agriculture and Natural Resources Industry Sector			
Turf and Landscape Management		X	A.S.
Golf and Grounds	X		
Irrigation Technician	X		
Landscaping Operation	X		
Arts, Media and Entertainment Industry Sector			
Audio and Video Technology		X	A.A.
Advanced Audio Video Technology		X	A.A.
Multimedia		X	A.S.
Animation Production	X		
Video Production	X		
Web Design and Development	X		
Photography		X	A.S.
Education, Child Development and Education Industry Sector			
Child Development and Education		X	A.S. and A.S.-T
Early Intervention and Inclusion		X	A.S.
Administration	X		
Art	X		
Assistant Teacher	X		
Associate Teacher	X		
Communication	X		
Deaf Culture	X		
Early Childhood Special Education	X		
Elementary Education	X		
Health and Safety	X		
Infant/Toddler	X		
Language and Literacy	X		
Nutrition	X		
School-Age Child Care	X		
Science	X		

Program	Employment Concentration	Certificate	Degree
Energy and Utilities Industry Sector			
Water Technology		X	A.S.
Engineering and Design Industry Sector			
Engineering Technology		X	A.S.
Green Collar Manufacturing	X		
Manufacturing Quality Assurance	X		
Small Wind Energy Technology	X		
Solar Photovoltaic Technology	X		
Solar Thermal Technology	X		
Surveying	X		
	X		
Geographic Information Science		X	A.S.
Engineering	X		
Geographic Information Systems	X		
Multimedia	X		
Programming	X		
Visual Design	X		
	X		
Finance and Business Industry Sector			
Business Administration		X	A.S. and A.S.-T
Project Management		X	
Business, Clerical	X		
Microsoft Applications Specialist		X	
Management/Supervision		X	A.S.
Office Administration		X	A.S.
Office Administration Technician		X	
Small Business Operations		X	
Health Science and Medical Technology Industry Sector			
Alcohol and Drug Studies		X	A.S.
Dual Diagnosis	X		
Allied Health			
Certified Nursing Assistant/Home Health Aide	X		
Emergency Medical Technician	X		
Emergency Medical Technician Advanced	X		
Diagnostic Medical Sonography		X	A.S.
NURSING: Registered Nursing			A.S.

Certificates, Degrees and Employment Concentrations

Program	Employment Concentration	Certificate	Degree
Hospitality, Tourism and Recreation Industry Sector			
Viticulture, Enology and Winery Technology	X		
Information Technology Industry Sector			
Computer Information Systems			A.S.
Computer Science			A.S.-T
General Track		X	
Computer Forensics	X		
Computer Hardware Specialist	X		
Data Analysis and Modeling	X		
Internet Authoring		X	
Internet Authoring Apprentice	X		
Internet and Web Technologies	X		
Networking		X	
Programming		X	
Public Services Industry Sector			
Administration of Justice		X	A.S.
Computer Forensics	X		
Corrections	X		
Fire Technology		X	A.S.
Fire Academy Preparation	X		
Fire Apparatus Operator Preparation	X		
Legal Assistant		X	A.S.
Legal Office Support	X		
Transportation Industry Sector			
Automotive Transportation Technology		X	A.S.
Automotive Emission Technician	X		
Automotive Service Advisor/Automotive Service Shop Management	X		
Engine Performance Technician	X		
General Technician	X		
Honda Fast track	X		

Our Commitment to Student Success

The Administration and Staff of MSJC are constantly findings ways to help our students succeed by:

- Providing classes in a diverse learning environment: traditional classroom setting, online and hybrid environment
- Offering classes in the daytime, evenings and on weekends at our four sites: Menifee Valley Campus, San Jacinto Campus, San Gorgonio Pass Campus, Temecula Education Complex
- Meeting with community and business leaders to collect feedback and review the ever-changing workplace demands
- Maintaining classroom technology with current industry standards

All of the Career Technical Education Programs at Mt. San Jacinto College have an Advisory Committee. CTE Advisory committees play an integral role in shaping the programs and curricula development at Mt. San Jacinto College. The committees help ensure that our programs remain in touch with the needs of local business and industry and that our students receive relevant instruction. Each CTE Advisory Committee consists of a group of individuals selected to represent broad points of view relative to a specific CTE area. The members should have a strong sense of commitment to the development of our educational program and our students. Members are recognized by the MSJC District Board of trustees and are invited to advise program faculty in the area of curriculum, career guidance, facilities, funding, and staffing. All of MSJC's CTE programs have an advisory committee that meets at least once per academic year.

COMMITTEE MEMBERSHIP

Membership on a MSJC CTE Advisory Committee is not limited to a specific portion of a particular occupation; rather membership includes a variety of individuals with diverse backgrounds that can provide varying advice and a broad perspective. Most CTE programs enjoy greater benefits when the CTE Advisory Committee represents both workers and supervisors. Therefore, our CTE Advisory committees combine people who perform the skills and those who hire and supervise workers. These individuals work together to give the instructional staff an accurate picture of the community's employment needs. The following groups of people are considered when identifying potential new CTE Advisory Committee members:

- Business Owners
- Employees
- Industry Representatives
- Students
- Community Members
- Supervisors
- Human Resource Directors
- Labor Representatives
- Parents

Actively involved Advisory Committee Members share common characteristics:

Leadership - Committee members should have demonstrated leadership within their company, occupation and/or the community. They should work well with their committee, as well as college staff, and possess the ability to present their ideas effectively.

Business Experience - Employer representatives will be selected from business or industry firms that are recognized for their progressive practices and efficient operations.

Adequate Time - Members selected must be able to devote sufficient time and enthusiasm to the committee's work. Serving will require participation in at least one committee meeting per year.

If you are interested in serving on one or more of our CTE Advisory Committee's, or would like specific meeting dates, and locations, please contact our CTE Special Programs Office for more information, via phone @ 951-639-5635 or via email at dmckee@msjc.edu. We are always looking for community members and business professionals to be a part of our CTE Advisory groups.

Helpful Resources:

http://www.msjc.edu/cte/Pages/default.aspx

http://statecenter.com/resources/industry-sectors

http://www.statewidepathways.org/

Continuing Education and Workplace Training provides professional, personal and career development courses, workshops and seminars that are relevant, current and are designed to meet the highest expected standards. The department is divided into three areas of **FOCUS:**

- Not-for-credit fee based classes
- Non-credit free classes
- Workplace Training – Employer paid on-site training

Note: The not-for-credit and the workplace training programs are self-supporting; they are not supported by the State of California. The non-credit offerings are supported by a combination of grants and the State of California.

FOCUS – Fee-Based Not-for-Credit Classes

Personal Enrichment classes and short seminar series provide personal development, leisure and recreation opportunities for the whole family. Topics include art, crafts, cooking, dance, language, music, and travel opportunities for cultural enrichment.

Professional Development classes and workshops are designed to help update your workplace skills. Topics include: Notary, CPR, MS Word, Excel, PowerPoint, QuickBooks and Office Skills Boot Camp.

Career Training & Certificates are short term training programs to assist the individual learner in gaining marketable job skills. Topics include: Pharmacy Technician, Optical Assistant, Medical Billing & Introductory Coding, Advanced Medical Coding, Photo Voltaic (PV) Solar Design and Installation Training, Veterinary Assistant, Personal Fitness Trainer, Home Inspection, Phlebotomy Technician and many more on-line options.

College for Kids classes are designed for fun interactive (experiential) learning for youth ages 8 to 17. Our summer program is expanding to include STEM classes throughout the year to help improve our local student's science, technology, engineering, math and analytical thinking skills.

FOCUS – Free Non-Credit Classes

English as a Second Language (ESL)

Citizenship

GED (General Education Development) Exam Preparation

Older Adults: Writing, Art, and Community Music Programs

FOCUS – Workplace Training

Our contract training program provides workplace training for our local business community. Training for employees can be provided on site or at a campus location. Classes can be for credit or not-for-credit to help improve and enhance productivity and a company's bottom-line. Areas of training include: customer service, English as a Second Language, accent reduction, supervision, LEAN Manufacturing, regulatory compliance updates, automotive specialties, medical insurance billing, software updates or specific skills customized for unique business needs.

Cooperative Work Experience Education (CWEE)

The Cooperative Work Experience Education Program (aka Occupational Internship Program) at Mt. San Jacinto College provides employers with technologically advanced students to serve as interns in the workplace. Student interns assume the duties of a part-time employee and are expected to have the basic technological training needed to fulfill the requirements of the position for which they are interning. Most students spend 10-15 hours per week for 12-15 weeks on the job while they are completing their second year at Mt. San Jacinto College. Students earn college credits for serving as interns which may be applied towards their certificate or degree.

The Cooperative Work Experience Education (CWEE) Program is a unique program that has been integrated into academic departments throughout the College. The program allows students to apply knowledge gained in their college courses with practical work experience to develop career readiness skills.

PROGRAM COMPONENTS

Online Orientation – Students interested in the Occupational Internship program will need to complete the CWEE Online Orientation and pass the exam with a score of 20.

Training Plan – The student, instructor, and work site supervisor work together to develop three objectives for the student to complete.

Timesheets – Are completed by the student to track hours worked.

1-2 Page Typed Essay – Submitted at the end of the semester and completed by the student. This document summarizes the initial objectives and how the student met those objectives. Faculty may determine the length of this assignment.

Final Self- Evaluation (Student) – The student will reflect on the following:
- What they have learned
- Challenges faced in the internship
- How they will continue to grow professionally

Final Evaluation (Employer) – At the end of the semester the student, worksite supervisor, and instructor meet for a final evaluation. Here the student presents a verbal summary of each objective and the tools used to complete each objective.

Attend Job Skills Workshop – By the end of the semester, students must attend a Job Skill Workshop. The workshop focuses on job search, resumé building, interviewing skills and professionalism in the work place.

STUDENTS BENEFIT BY:

- Earning college credit
- Receiving earned income or vital work experience
- Obtaining hands-on work experience
- Applying classroom theory to real work situations
- Developing workplace skills

COMPANIES BENEFIT BY:

- Interns who are an excellent worker pool
- Interns for reduce recruitment and training costs
- Interns with reliable & skilled permanent employees
- Interns who contribute to business success
- Interns will increase visibility & public outreach

INSURANCE COVERAGE:

The college provides insurance coverage for those students participating in the unpaid techniques.

A HUGE THANK YOU TO SOME OF OUR INTERNSHIP PARTNERS:

Canear Real Estate

Eastern Municipal Water District

Hemet Police Department

Hemet San Jacinto Valley Property Managers

Light House Properties

Maurice Car'rie Winery

Murrieta Police Department

Native American Environmental Protection Coalition

Predator Motorsports

Riverside County Sheriff's Department

Riverside County Substance Abuse

Riverside Recovery Resource

Somerset

Sun Ray Addictions Counseling

Tarbell Realtors

The Leadership Source

"We have such great CTE programs because of our great faculty!"

Don't tell people how to do things, tell them what to do and let them surprise you with their results.

—George S. Patton

Larry Barraza
Business

Bill Bennett
Computer Information Systems

PHOTO NOT AVAILABLE

Bil Bergin
Computer Information Systems

Ron Bowman
Business & Accounting

David Candelaria
Business & Accounting

Dwight Duffie
Computer Information Systems

Keith Hanz
Photography

Michelle Harper
Child Development

Dewey Heinsma
Economics

Dr. Caren Hennessy
Business

Michael Jennings
Fire Technology

Richard LeGarra
Administration of Justice

Linda Middleton
Child Development

Rhonda Nishimoto
Multimedia

"We have such great CTE programs because of our great faculty!"

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Dr. Wendy Orcajo
Child Development

Dave Parrott
Audio & Video Technology

Roddy Rampersad
Automotive Transportation Technology

Guy Reams
Computer Information Systems

Gloria Sanchez
Business & Accounting

Belinda Heiden Scott
Business

Lorraine Slattery-Farrell
Child Development

Donald Smith
Multimedia

Dr. Glenn Stevenson
Computer Information Systems

Samson Wakjira
Economics

We may affirm absolutely that nothing great in the world has been accomplished without passion.

—Hegel

Thank you for your leadership and dedication!

High school articulation is a process where a student can take a high school or ROP program class and receive college credit for the class(es) at MSJC.

Articulating college courses with our local high schools/districts helps to build ***career pathways*** that help students to transition seamlessly from high school to college programs of study. Having high school students complete entry level courses at the high school through articulation may result in more students entering intermediate level classes in your program of study. The high school students must maintain a B or better in the class and pass the credit exam with an A or B. Students who pass the exam will have mastered the same competencies and learning objectives that are expected in the comparable course Mt. San Jacinto College.

How can articulated credit help students?

- Students get a jump start by earning college credit while still in a high school or ROP program

- Students do not repeat coursework

- Students will obtain basic skills and knowledge making them "career and college ready"

- Students save money on the cost of college tuition and textbooks

- Connect their learning to career pathways

We currently have articulation agreements for many of our CTE Programs including Administration of Justice, Allied Health, Audio Video Technology, Automotive, Biotechnology, Business, Child Development, Computer Applications, Engineering, GIS, Horticulture, and Multimedia.

For more information about High School Articulation,

please visit our CTE Transitions website at:

http://www.msjc.edu/CTETransitions/Pages/default.aspx

Career Technical Education Outreach

CTE Outreach Specialists are now available to promote MSJC's CTE programs and services. Below are some of the activities they participate in:

- *High School Career/Job Fairs*

- *MSJC College Hour*

- *MSJC Career/Job Fairs*

- *CTE Advisory Committee Meetings*

- *Community Career/Job Fairs*

- *High School Classroom Visits*

- *Business Summits*

- *Special CTE Program Events like GIS Day, Engineering Day, and FAVE*

To schedule an activity with the CTE Outreach Specialists, contact the CTE, Special Programs Office at 951-487-3437 or via email at eaglecte@gmail.com

For more information you can also visit the following websites at:

http://www.msjc.edu/cte/Pages/default.aspx

http://www.msjc.edu/CTETransitions/Pages/default.aspx

Career Technical Education: Career Technical Education (CTE) programs are designed to engage, motivate, and prepare students for the future. The academic, technical, and workplace skills offered through CTE are essential to success for all working adults. They are essential to society in addressing the challenges posed not only by a changing economy, but also by a changing world.

CTE can no longer exist as a separate educational alternative; it must be woven into the very fabric of our educational delivery system. Access must therefore be assured for all students through a system that aligns programs, curricula, and services across educational segments, programs, and disciplines

State of California Industry Sectors: In response to labor market data and the State's changing workforce needs, the California Department of Education identified fifteen industry sectors that exist in the State of California. Each sector contains multiple career pathways. Mt. San Jacinto College offers a variety of certificate and degree options that align with eleven of those fifteen industry sectors and multiple career pathways. Our programs and curricula are designed to be responsive to the economy, inclusive of relevant workplace skills and engaging to students. Our CTE Programs and the certificate, degree and employment concentration options for each are outlined in this CTE Catalog. Options are available for young students to explore various career opportunities as well as for adults to learn and upgrade their skills making the transition to a new position or career feasible.

The industry sectors emphasized at Mt. San Jacinto College in our Career Technical Education (CTE) Department include:

- Agriculture and Natural Resources
- Arts, Media and Entertainment
- Education, Child Development and Education
- Energy and Utilities
- Engineering and Design
- Finance and Business
- Health Science and Medical Technology
- Hospitality, Tourism and Recreation
- Information Technology
- Public Services
- Transportation

The Agriculture and Natural Resources sector is designed to provide a foundation in agriculture for all agriculture students in California. Students engage in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, and skill preparation in seven pathways. The pathways emphasize real-world, occupationally relevant experiences of significant scope and depth in Agricultural Business, Agricultural Mechanics, Agriscience, Animal Science, Forestry and Natural Resources, Ornamental Horticulture, and Plant and Soil Science. Integral components of classroom and laboratory instruction, supervised agricultural experience projects, and leadership and interpersonal skills

Turf & Landscape Management: The non-transfer Certificate/Associate degree (AS) in Turf & Landscape Management is primarily designed to prepare the student for entry into careers associated with golf course management and turf management. This program specifically provides students with a strong foundation in turf management, water usage, fertility, soils, horticulture and human resource management for golf courses, recreational parks, sports fields and general landscape areas. This program also prepares students to enter the job market as a golf course superintendent, field crew supervisor, irrigation technician, equipment manager, grounds person for parks, cities, and school districts, or field crew foreman for landscape contractors. The Certificate/Associate degree (AS) program in Turf & Landscape Management prepares students with the technical and analytical skills necessary for managing a golf course or turf/horticultural area. For individuals currently working within these fields, there may be potential for salary and/or career advancement.

CERTIFICATE

The Turf & Landscape Management certificate includes 9 units of foundational courses and 9 units of elective courses per employment concentration.

Certificate in Turf & Landscape Management
(18 units)

Required Core Courses *(9 units)*

HORT-101	Horticulture Science	3 units
HORT-102	Introduction to Turfgrass Management	3 units
HORT-104	Soil Science and Management	3 units

DEGREE

An Associate in Science (AS) degree may be earned by completing the 18 unit certificate requirements in Turf & Landscape Management and all MSJC General Education Option A requirements.

EMPLOYMENT CONCENTRATIONS

Golf and Grounds Concentration *(9 units)*
Irrigation Technician Concentration *(9 units)*
Landscaping Operation Concentration *(9 units)*

Please see the Mt. San Jacinto College Catalog for course descriptions and requirements.

CAREER OPPORTUNITIES

Landscaping and Grounds Keeping Workers

First-Line Supervisors of Landscaping

Lawn Service and Grounds Keeping Workers

Pesticide Handler, Sprayer and Applicator

* All career opportunities listed in this catalog are representative careers in each industry sector. There are no guaranteed positions for students completing these programs. Education and work experience required will vary by employer. The salary and benefits for specific occupations will be dependent on work experience, education, background and employer. For more information about these industry sectors and/or occupations visit www.onetonline.org.

The Arts, Media and Entertainment Industry sector provides multiple career options, especially in California. Most careers in this industry combine creativity with technical skills. The work in this sector has a tendency to be largely project-based, requiring uniquely independent work and self-management career skills. New technological developments are also constantly reshaping the boundaries and skill sets of many arts career pathways. Consequently, core arts sector occupations demand constantly varying combinations of artistic imagination, symbolic connections, and technical skills.

Successful career preparation involves both in-depth and broad academic preparation as well as the cultivation of such intangible assets as flexibility, problem-solving abilities, and interpersonal skills. Careers in the Arts, Media, and Entertainment sector fall in three general pathways: Media and Design Arts, Performing Arts, and Production and Managerial Arts. Mt. San Jacinto College has several programs that align with this industry sector that will help students to explore their creative side and develop their technical skills— Audio Video Technology, Multimedia and Photography.

Audio & Video Technology: The Audio & Video Technology Program is a non-transfer program offering two A.A. degrees and two certificates. Many courses do, however, transfer; however, this program is not usually associated with a four-year degree. The program features a radio station, television station and studio, and three recording studios. This program prepares students for a "hands on" and theoretical applications in audio and video. Students will become familiar with devices used in television, radio, film, recording studios, and educational institutions. Some Protools certifications may be available. Most audio classes are cross-listed under music. For many individuals currently working within these fields, there may be potential for salary and/or career advancement.

Multimedia: The non-transfer Certificate/Associate degree (AS) in Multimedia is designed to prepare students for entry into careers associated with web design, animation and video production. This program specifically provides students with a strong foundation in information and graphic design applications and concepts, professional production skills, verbal and visual creativity, and individual and team accountability and interaction. For individuals currently working within these fields, there may be potential for salary and/or career advancement.

Photography: The MSJC Photography program offers non-transfer certificate and Associate degree opportunities that respond to new-media industry standards in the digital paradigm. This immersive path of study includes extensive technical and creative production guidance and skill sets. The career-oriented student will study the ubiquitous nature of photographic visual communication while gaining a comprehensive understanding of digital photography workflow and digital asset management.

The digital fixing of the photographic image with electronic light sensors and computer software rivals milestones in history like the invention of paper, the printing press, or chemistry-based image fixing. Extinct is hand calligraphy in advertising, illuminated manuscripts in printing or the emulsion-based image on tin, for example. Emulsion-based photography has methodically given way to a digital era in image production — an evolution akin to dinosaurs evolving into birds — only faster. For these reasons a versatile and truly state-of-the-art digital studio, light room, and imaging lab has been designed and constructed to facilitate the photography department's industry-responsive digital curriculum. Beginning through advanced students will avail themselves of a 1,325 square foot digital imaging studio with high ceilings and versatile photographic environments — all networked to a digital light room and other adjoining learning facilities.

Students will benefit from hands-on exposure to real-world tools. These tools are fast, high-resolution capture, manipulation and output devices that will allow students to fully explore the photographic realm. For individuals currently working within these fields, there may be potential for salary and/or career advancement.

CERTIFICATES

Certificate in Audio Technology *(18 units)*
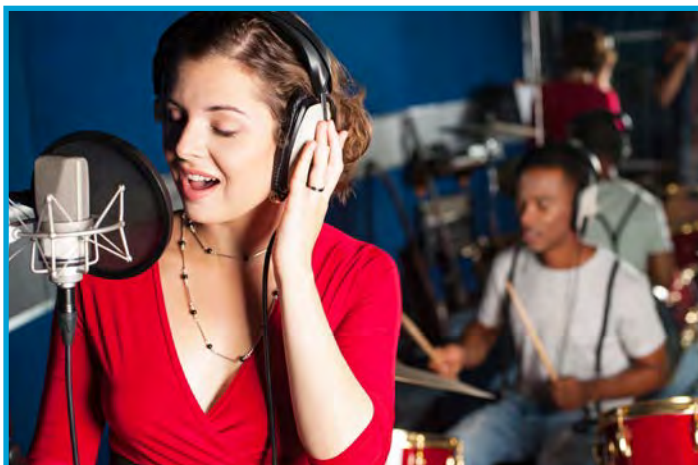
Required Courses *(12 units)*

AUD-140 /MUS-140	Beginning Studio Recording	3 units
AUD-141/MUS-141	Intermediate Studio Recording	3 units
AUD-142/MUS-142	Advanced Studio Recording I	3 units
AUD-143/MUS-143	Computer Audio Editing	3 units

Elective Courses *(6 units)*

AUD-145/MUS-145	Midi & Computer Recording	3 units
AUD-146/MUS-146	Recording Music and Live Sound	3 units
AUD-147/BADM-147/MUS-147		
	The Music & Audio Business	3 units
AUD-148	Radio Production	3 units
AUD-152/MUL-123	Video Production I	3 units
AUD-153/MUL-223	Video Production II	3 units
MUS-100	Introduction and Appreciation of Music	3 units
or		
MUS-100H	Honors Introduction and Appreciation of Music	3 units
MUS-101	Music Fundamentals	3 units
MUS-107	Introduction and Appreciation of American Music	3 units
	or	
MUS-107H	Honors Introduction and Appreciation of American Music	3 units

MUL-123/AUD-152		
	Video Production I	3 units
MUL-125	Interactive Motion Media	3 units
MUL-131	3D Animation	3 units
MUL-139	Advanced Animation	3 units
MUL-149	Occupational Internship: Multimedia	1-4 units
MUL-218	Dynamic Web Design	3 units
MUL-299	Special Projects: Multimedia	1-3 units
THA-135	Introduction to Film	3 units

Certificate in Photography (18 units)

Required (15 units)

ART-120	2D Design	3 units
MUL-110	Introduction to Multimedia	3 units
PHOT-125	Digital Photography Production I	3 units
PHOT-224	Digital Photography Production II	3 units
PHOT-225	Digital Photography Production III	3 units

Electives (3 units)

AUD-152/MUL-123		
	Video Production I	3 units
BADM-104	Business Communications	3 units
or		
BADM-104H	Honors Business Communications	3 units
HIST-136/THA-136		
	Cultural History of American Motion Pictures	3 units
MUL-112	Interactive Media Design I	3 units
MUL-114	Multimedia Project Management	3 units
MUL-131	3D Animation	3 units
MUL-149	Occupational Internship: Multimedia	1-3 units
PHOT-090	Digital Imaging Studio Laboratory	1 unit
PHOT-091	Professional Production Studio Laboratory	1 unit
PHOT-130	History of Still Photography	3 units
PHOT-299	Special Projects: Photography	1-3 units

All career opportunities listed in this catalog are representative careers in each industry sector. There are no guaranteed positions for students completing these programs. Education and work experience required will vary by employer. The salary and benefits for specific occupations will be dependent on work experience, education, background and employer. For more information about these industry sectors and/or occupations visit www.onetonline.org.

Certificate in Advanced Audio Technology (27 units)

Required Courses (18 units)

AUD-140/MUS-140	Beginning Studio Recording	3 units
AUD-141/MUS-141	Intermediate Studio Recording	3 units
AUD-142 /MUS-142	Advanced Studio Recording I	3 units
AUD-143/MUS-143	Computer Audio Editing	3 units
AUD-145/MUS-145	Midi &Computer Recording	3 units
AUD-146/MUS-146	Recording Music and Live Sound	3 units

Elective Courses (9 units from the following)

AUD-147/BADM-147/MUS-147		
	The Music & Audio Business	3 units
AUD-148	Radio Production	3 units
AUD-152/MUL-123	Video Production I	3 units
AUD-153/MUL-223	Video Production II	3 units
MUS-100	Introduction and Appreciation of Music	3 units
or		
MUS-100H	Honors Introduction and Appreciation of Music	3 units
MUS-101	Music Fundamentals	3 units
MUS-107	Introduction and Appreciation of American Music	3 units
or		
MUS-107H	Honors Introduction and Appreciation of American Music	3 units

Certificate in Multimedia (24 units)

Required Courses (12 units)

ART-120	2D Design	3 units
MUL-110	Introduction to Multimedia	3 units
MUL-112	Interactive Media Design I	3 units
MUL-114	Multimedia Project Management	3 units

Elective Courses (12 units)

ART-108	Beginning Drawing	3 units
AUD-145/MUS-145		
	Midi & Computer Recording	3 units
CSIS-115A	Web Development – Level 1	3 units
CSIS-125A	Web Development – Level 2	3 units
MUL-116	Social Media Marketing	3 units

DEGREES

A.A. in Audio Technology (18 units)

In addition to the 18 units of the Audio Technology Certificate Program, students may complete MSJC General Education Option A requirements for the Associate in Arts (AA) degree in Audio Technology.

A.A. in Advanced Audio Technology (27 units)

In addition to the 27 units of the Advanced Audio Technology Certificate Program, students may complete MSJC's General Education Option A requirements for the Associate in Arts (AA) degree in Advanced Audio Technology.

A.S. in Multimedia

The major requirement for an Associate in Science degree (AS) in Multimedia may be met by completing 24 units of those required for the Multimedia certificate. Students planning to transfer should major in General Education and consult with instructors and counselors; since some Multimedia courses may satisfy MSJC General Education Option A requirements.

A.S. in Photography

The major requirement for an Associate in Science degree in Photography may be met by completing the core photography curriculum and any electives totaling 18 units and meeting all other MSJC General Education Option A requirements.

EMPLOYMENT CONCENTRATIONS

Animation Production (15 units)

This Employment Concentration Certificate provides the preparation necessary for an entry-level 2D production job, such as Cel Animator Assistant, In-betweener, Clean-Up Artist or Stop-Motion Animator or entry-level 3D production job, such as Assistant in Modeling, Shading or Lighting areas.

|		
MUL-125	Interactive Motion Media	3 units
MUL-131	3D Animation	3 units
MUL-133	Production Management-Entertainment	3 units
MUL-134	2D Animation	3 units
THA-135	Introduction to Film	3 units

Video Production (15 units)

This Employment Concentration Certificate provides the preparation necessary for an entry-level video production job, such as Assistant to the Camera Operator, Editor Assistant and Production Assistant. These positions perform work for TV broadcasts, advertising, video production, or motion pictures. They work with Producers or Directors responsible for creative decisions, such as interpretation of script, choice of guests, set design, sound, special effects, and choreography.

MUL-110	Introduction to Multimedia	3 units
MUL-123/AUD-152		
	Video Production I	3 units
MUL-133	Production Management - Entertainment	3 units
MUL-223/AUD-153		
	Video Production II	3 units
THA-135	Introduction to Film	3 units

Web Design (15 units)

CSIS-125A	Web Production – Level 2	3 units
or		
MUL-116	Social Media Marketing	3 units
MUL-110	Introduction to Multimedia	3 units
MUL-112	Interactive Media Design I	3 units
MUL-125	Interactive Motion Media	3 units
MUL-218	Dynamic Web Design	3 units
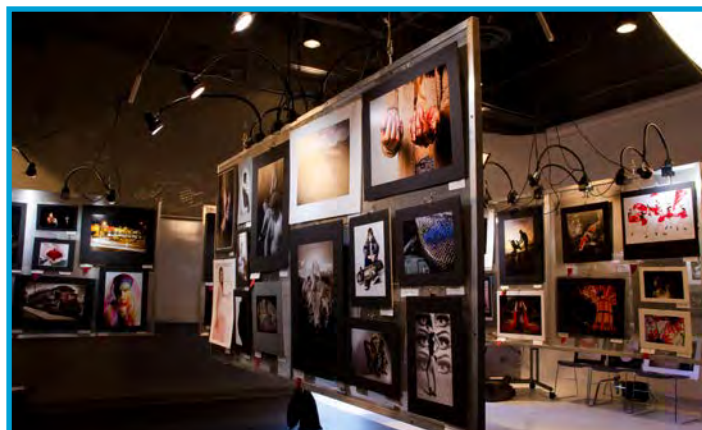
CAREER OPPORTUNITIES

- Audio Video Equipment Technician
- Security Analysts, Web Developers and Computer Network Architects/Designer
- Photographer
- Broadcast and Sound Engineering Technicians
- Multimedia Artists and Animators
- Radio Disc Jockeys
- Film & Video Editor

The Education, Child Development, and Family Services sector is composed of four career pathways: Child Development, Consumer Services, Education, and Family and Human Services. This industry sector is one of the fastest growing in the nation. It is projected to grow nearly 40% by 2016. The high staffing needs and growing emphasis on improving education will create exciting career opportunities in the child development field fields.

Child Development and Education:

The Child Development and Education (CDE) Program offers a transfer degree in Early Education Studies, a non-transfer degree and Certificate in Child Development and Education as well as Early Intervention and Inclusion. The CDE major includes required courses in child development and general education electives.

Child Development Education is the study of the physical, psychosocial and cognitive growth and development of the child from conception through adolescence. The purpose of this major is to provide a sound academic program in Child Development and to prepare students to work with and advocate for children and families in a variety of school and community settings.

In addition to theoretical principles, the curriculum offers practical skills and on-site training that will prepare students for employment in the field of Education.

Child Development and Education students pursue careers in childcare, preschool teaching and administration, early intervention services, parent education, primary, secondary and post-secondary education, teaching and supporting children with special needs or working with a variety of counseling, social service and community agencies.

The program fulfills the required child development course work for the State issued Child Development Permit. Information regarding this permit and/or the Child Development and Education and Early Intervention and Inclusion Certificates is available from the CDE Department. All course work leading to a certificate or degree must be completed with a minimum grade of "C" (2.0) or better.

CHILD DEVELOPMENT AND EDUCATION DEGREES

A.S.-T in Early Childhood Education for Transfer (24 units)*

An Associate in Science degree in Early Childhood Education for Transfer will fulfill the requirements for students to transfer to a four-year college or university as a Early Childhood Education major.

The major required for an A.S.-T in Early Childhood Education for Transfer may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0. A minimum of 18 semester units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

A.S. in Child Development and Education (43 units)

An Associate in Science (AS) degree in Child Development and Education may be earned by completing the 43 units required for the MSJC Child Development and Education Certificate, and all MSJC General Education Option A requirements.

A.S. in Early Intervention and Inclusion (43 units)

An Associate in Science (AS) degree in Early Intervention and Inclusion may be earned by completing the 43 units required for the MSJC Child Development and Education Certificate, and all MSJC General Education Option A requirements.

CERTIFICATES AVAILABLE FOR CHILD DEVELOPMENT AND EDUCATION

Certificate in Child Development and Education (43 units)

Certificate in Early Intervention and Inclusion (43 units)

EMPLOYMENT CONCENTRATIONS*

Administration *(6 units)*	Elementary Education *(6 units)*
Art *(5 units)*	Health & Safety *(6 units)*
Assistant Teacher *(6 units)*	Infant/Toddler *(6 units)*
Associate Teacher *(12 units)*	Language and Literacy *(6 units)*
Communication *(6 units)*	Nutrition *(6 units)*
Deaf Culture *(6-7 units)*	School-Age Child Care *(6 units)*
Early Childhood Special Education *(9 units)*	Science *(6 units)*

*Please See the MSJC College Catalog for a more comprehensive look at the Child Development Education program including certificates, degrees, courses, permits, requirements and Employment Concentration Certificates.

CAREER OPPORTUNITIES IN CHILD DEVELOPMENT AND EDUCATION

- Preschool Teacher
- CDE Permit: Teacher
- CDE Permit: Site Supervisor
- CDE Permit: Assistant Teacher
- CDE Permit: Associate Teacher
- CDE Permit: Master Teacher

The Energy and Utilities sector is designed to provide a foundation in energy and utilities for all students in California. The pathways emphasize real-world, occupationally relevant experiences of significant scope and depth in Electromechanical Installation and Maintenance, Energy and Environmental Technology, Public Utilities, and Residential and Commercial Energy and Utilities. The standards integrate academic and technical preparation and focus on career awareness, career exploration, and skill preparation in four pathways. The following components are integral to the Energy and Utilities sector pathways: classroom, laboratory, hands-on contextual learning, project-and work-based instruction, internship, community classroom, cooperative career technical education, and leadership development. The Energy and Utilities sector standards prepare students for continued training, postsecondary education, or entry to a career.

Water Technology: Water Technology is a career oriented non-transfer vocational program offering courses leading to a certificate and/or an Associate degree. The Water Technology program at MSJC emphasizes a real world approach to diagnostic skill building and a thorough understanding of system theory and operations. Professionalism, workplace skills and responsibilities are stressed along with safety and an awareness of hazardous materials control. Graduates are primarily employed by cities, counties, federal agencies and industry that operate and maintain water treatment, water distribution, wastewater collection and/or wastewater treatment systems. They may also find employment in support roles such as equipment sales. For individuals currently working within these fields, there may be potential for salary and/or career advancement.

DEGREE

The 18 units in the certificate plus all MSJC General Education Option A requirements for a total of 60 units is required to earn an Associate in Science degree in Water Technology. See counselor for recommended vocational and academic courses

CERTIFICATE

Certificate in Water Technology (18 units)

Required Core Courses *(3 units)*

WATR-100	Introduction to Water/Wastewater Operations	1 unit
WATR-090	Basic Waterworks Mathematics	2 units

Elective Courses *(any 15 units)*

WATR-103	Water Treatment Plant Operations I & II	3 units
WATR-105	Water Treatment Plant Operations III, IV & V	3 units
WATR-107	Water Distribution I & II	3 units
WATR-109	Water Distribution III, IV & V	3 units
WATR-120	Wastewater Treatment Plant Operations I & II	3 units
WATR-122	Wastewater Plant Operations III, IV & V	3 units
WATR-125	Laboratory Procedures for Water and Wastewater	3 units
WATR-130	Environmental Laws and Regulations	3 units
WATR-140	Wells, Pumps and Motors	3 units

CAREER OPPORTUNITIES

- Meter Reader, Utilities
- Water and Wastewater Treatment Plant and System Operators
- Water Resource Specialist
- Wastewater Engineer

The Engineering and Design sector is designed to provide a strong foundation in engineering and design for students in California. Students are engaged in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, and career preparation. The demand for engineers in a variety of specializations throughout California and the nation will remain high. Mt. San Jacinto College offers the following programs that are aligned with this industry sector..

Engineering Drafting Technology:
The Engineering: Drafting Technology Program is a non-transfer program offering an A.S. degree, one certificate, and six employment concentration certificates. Many courses do, however, transfer to four year college and universities. The program will prepare students for a career in civil engineering, architecture, surveying, and manufacturing processing. Students become familiar with computer hardware and software programs which will assist in the aerospace industry to construction. The manufacturing courses allow students to step into jobs which concentrate in Small Wind Energy Technology, Solar Photovoltaic Technology, Solar Thermal Technology, Green Collar Manufacturing and Manufacturing Quality Assurance. For individuals currently working within these fields, there may be potential for salary and/or career advancement.

Geography and Geographic Information Science (GIS):
The A.A.-T in Geography transfers to a four-year college and prepares students for a future in a field related to Geography. The Geographic Information Science (GIS) non-transfer Certificate and AS degree prepares students for GIS related careers which are enhanced by completion of a bachelor or graduate program. For students currently working within these fields there may be potential for salary and/or career advancement.

From local to global scales, geographers study political organization, transportation systems, marketing, economics, climate and weather, urban planning, land use development, globalization, and more. They examine distribution of land forms, study soils and vegetation, analyze limited resources such as water, and human impacts on the surface of the planet. In general, Geographers work in government research, public agencies, and are environmental consultants for nonprofit organizations.

Geographic Information Science (GIS) involves basic to advanced analysis and scientific research methods for identifying patterns, trends and relationships that are represented spatially and temporally on maps, large databases, reports and animations. Recent advancements make it possible to analyze, interact and produce maps using cloud technology. Students enrolled in our GIS courses online have the advantage of learning advanced communication and mapmaking skills that prepare them for a career in GIS, anywhere.

DEGREES

A.S. in Engineering

An Associate in Science degree in Engineering: Drafting Technology is available to students completing the certificate in Engineering: Drafting Technology and meeting all other MSJC General Education Option A requirements.

A.A.-T in Geography for Transfer (18-21 units)

An Associate in Arts in Geography for Transfer will fulfill the requirements for students to transfer to a four-year college or university as a Geography major. The major required for an A.A.-T in Geography for Transfer may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

Required Core *(6 units)*

GEOG-101	Physical Geography	3 units
GEOG-102	Cultural Geography	3 units

List A: Select two to three (6-8 units)

GEOG-103	Field Studies in Geography	2-4 units
GEOG-104	Physical Geography Lab	1 unit
GEOG-105	Map Interpretation and Spatial Analysis	3 units
GEOG-106	Introduction to Weather and Climate	3 units
GEOG-108	World Regional Geography	3 units
GEOG-111	Geography of California	3 units
GEOG-115	Introduction to Geographic Information Science	3 units

List B: Select two *(6-7 units)*

ANTH-102	Cultural Anthropology	3 units
or		
ANTH-102H	Honors Cultural Anthropology	3 units
GEOL-100	Physical Geology: Dynamic Planetary Systems of Spaceship Earth	4 units
GEOG-107	Urban Geography	3 units

Units for Major   18-21

CSU General Education or IGETC Pattern	37-39
Possible double counting	10
Transferable Electives *(as needed to reach 60 CSU transferable units)*	

Total Units for A.A.-T Degree   60 units

This Associate in Arts in Geography for Transfer degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A student completing this degree is guaranteed admission to the CSU system, but not a particular campus or major. Students should meet with a counselor to develop an educational plan and receive university admission and transfer requirements.

Degree in Geographic Information Science (18 units)

An Associate in Science degree in GIS may be earned by completing the 18 units for the GIS Certificate, as well as all MSJC General Education Option A requirements (for a total of 60 units)

CERTIFICATES

Certificate in Engineering: Drafting Technology (19 units)

Competency in English and math is required prior to completing a certificate. This may be accomplished by testing or completion of ENGL-101 and MATH-096.

Required Courses *(16 units)*

ENGR-154	Computer Aided Drafting I	3 units
ENGR-155	Computer Aided Drafting II	3 units
ENGR-164	Plane Surveying I	4 units
GEOG-115	Introduction to Geographic Information Science	3 units
PHOT-125	Digital Photography Production I	3 units

Elective Courses *(3 units)*

ENGR-156	SolidWorks I	3 units
ENGR-157	Microstation I	3 units
ENGR-167	Global Positioning Systems	4 units
ENGR-180	Introduction to Engineering	3 units
ENGR-181	Statics	3 units
ENGR-182	Strength and Materials	4 units

Certificate in Geographic Information Science (18 units)

Required Courses **(12 units)**

GEOG-105	Map Interpretation and Spatial Analysis	3 units
GEOG-115	Introduction to Geographic Information Science	3 units
GEOG-120	Intermediate Geographic Information Science	3 units
GEOG-125	Advanced Geographic Information Science	3 units

Elective Courses *(minimum 6 units)*

Elective courses are identified under the following concentration areas. Students must complete 6 units (any combination) under one concentration area to earn a Certificate in GIS. Once a Certificate in GIS has been earned, additional Certificates in GIS may be awarded for completion of 6 units in other concentration areas.

EMPLOYMENT CONCENTRATIONS*

Engineering Technology

Green Collar Manufacturing (15 units)

Manufacturing Quality Assurance (12 units)

Small Wind Energy Technology (15 units)

Solar Photovaltaic Technology (15 units)

Solar Thermal Technology (15 units)

Surveying (14-15 units)

Geography and Geographic Information Science (GIS)

Engineering (6 units)

Geographic Information Science (6 units)

Multimedia (6 units)

Programming (6 units)

Visual Design (6 units)

*Please See MSJC College Catalog for Full Description of the Employment Concentration Certificates.

CAREER OPPORTUNITIES

- Engineering Technician
- CAD Technician
- Surveying Technicians
- Geographic Information Systems Technicians
- Geodetic Surveyors
- Mapping Technicians

Persons trained in such fields as accounting, banking, and finance will find that their skills are highly marketable. The Finance and Business Industry sector employs more than 6 million people in related occupations nationwide. Students master basic accounting principles and procedures before proceeding to the career path specializations. The specializations emphasize concepts of accounting and finance, including computer applications, taxes, investments, and asset management. Because almost every business organization has an accounting component, students with knowledge of accounting will find that opportunities exist in many other career paths in addition to those in finance and business. New advances in technology and direct marketing are expected to cause growth in a variety of business and finance careers including bankers, investors, auditors and accountants. Opportunities for self-employment and individual business development have never been better due to the Internet and advances in portable devices such as I-PADS and smartphones.

The Business Department at Mt. San Jacinto College is committed to providing a broad and flexible professional education. The Department offers a variety of programs and courses that fall within the Finance and Business that will provide students with learning opportunities relevant to everyday business and consumer decisions.

Business Administration: The Business Department offers an Associate in Science in Business Administration for Transfer degree. The Business Administration curriculum is designed for students who are interested in an encompassing formal business education. The A.S.-T in Business Administration for Transfer degree will assure preparation and readiness for transfer to the CSU system.

The Business Department also offers a non-transfer Associate degree in Business Administration structured around a set of core courses enabling students to develop a general business perspective and skills. The program offers students the knowledge and skills necessary to understand the changing global and domestic business environment and to prepare students for success in their professional careers.

The non-transfer Certificate in Business Administration provides a broader theoretical overview and approach to the business world while the non-transfer Certificate in Small Business Operations provides a focus on practical small business operation skills and techniques. The Business Department is committed to providing a broad and flexible professional education. Recognizing the importance of Accounting, Business Law, Economics, Finance, and Marketing in the business community; these areas provide students with learning opportunities relevant to everyday business and consumer decisions.

Transfer students may earn an Associate degree in Liberal Arts with an area of emphasis that includes Business and Technology. This degree path is designed to accommodate the differing requirements for a wide variety of transfer institutions and provides an efficient means to achieve transfer goals and career success.

Business Clerical, Microsoft Applications Specialist and Office Administration: Coursework in these areas will provide for the study of a wide range of subjects related to positions and careers in the modern office. The program includes training necessary to successfully perform in the many and varied Application Specialists and Administrative Assistant positions available in today's job market. Job seekers will have opportunities in the private sector, for government agencies and with not-for-profit agencies such as secretaries, office manager or administrative assistants.

Economics: The Economics program is intended for students who are planning to transfer to a four-year college or for a business occupational area of his/her own choice. Transfer students may earn an Associate degree in Liberal Arts with an area of emphasis that includes either Business and Technology, or Social and Behavioral Sciences. These degree paths are designed to accommodate the differing requirements for a wide variety of transfer institutions and provide an efficient means to achieve transfer goals and career success.

Economics is a social science discipline focusing on the development of critical thinking and logical analysis, mathematical concepts and quantitative reasoning through communication and composition, problem-based learning, and the study of economic literature. These skills provide the fundamental foundation for academic and career path success. The economics curriculum is designed to equip students with the skills and knowledge of macroeconomics, microeconomics, and environmental economics; as related to politics and history, business and markets, governments and global economies, as well as social and cultural institutions.

Economic majors may pursue diverse career paths that include an array of opportunities, both in government, private, and international sectors.

Hospitality/Tourism: The Hospitality and Tourism industry offers exciting career opportunities in a variety of occupations. Students will gain skills and knowledge to prepare them for employment in the fast growing Temecula Valley region. Opportunities are available for those who want to serve guests at both hotels and wineries. Completion of courses in the Event Operations Employment Concentration Certificate will gain skills necessary to pursue careers in the travel tourism industry locally and worldwide.

Office Administration: The Business Department offers a non-transfer Associate degree in Office Administration designed to introduce the student to the study of a wide range of subjects related to positions and careers in the modern office. The program includes the training necessary to successfully perform in the many and varied Office Technician and Administrative Assistant type positions available in the job market.

The Business Department is committed to providing a broad and flexible professional education. Recognizing the importance of office communications, office computer applications, records management, and virtual technology in the business community, these areas provide students with learning opportunities relevant to everyday business.

Management/Supervision: The Management/Supervision Department offers a non-transfer Associate degree and a non-transfer Certificate in Management/Supervision designed to prepare the student to direct the work of others. The program offers students the opportunity to acquire practical skills, technical knowledge and experience, and improve conceptual abilities and theory in the areas of analyses, evaluation, selection, communication, production, and follow-up. Both the Associate degree and the Certificate share the same lists of required, recommended elective, and elective discipline specific coursework with the difference being the required general education pattern for the degree.

The Management/Supervision Department is committed to providing a broad and flexible professional education. The studies introduce the student to dynamic processes of goals and objectives setting, planning, and achieving results for the organization. Also emphasized are the recognition of, and the leadership for, changing environments and relationships. Although emphasis is on business and economics of the organization, the learning is relevant to individual daily life.

Real Estate: The MSJC Real Estate program offers the opportunity to earn a non-transfer certificate or degree. This program also provides the educational requirements for the real estate broker's license and real estate salesperson's license (issued by the State of California Department of Real Estate). Coursework prepares students for work in this dynamic profession. Essential success skills are emphasized including: ethics, professionalism, sales, financing, property valuation, law, and economics.

CERTIFICATES

Competency in English and math is required prior to completing either certificate. This may be accomplished by testing or completion of ENGL-098 (English Fundamentals) and MATH-090 (Elementary Algebra).

Certificate in Business Administration *(24 units)*

Required Courses *(15 units)*

ACCT-124	Financial Accounting - Principles of Accounting I	3 units
or		
ACCT-124H	Honors Financial Accounting - Principles of Accounting I	3 units
BADM-103	Introduction to Business	3 units
or		
BADM-103H	Honors Introduction to Business	3 units
BADM-201	Legal Environment of Business	3 units
MGT-103	Introduction to Management	3 units
or		
MGT-103H	Honors Introduction to Management	3 units
MGT-205	Principles of Marketing Management	3 units

Recommended Courses *(Take 3 units from this list)*

CSIS-101	Introduction to Computers and Data Processing	3 units
ECON-201	Principles of Macroeconomics	3 units
or		
ECON-201H	Honors Principles of Macroeconomics	3 units

Elective Courses *(Take 6 units from this list)*

ACCT-125	Managerial Accounting - Principles of Accounting II	3 units
or		
ACCT-125H	Honors Managerial Accounting - Principles of Accounting II	3 units
ACCT-126	Beginning Computer Accounting	3 units
ACCT-127	Federal and California Income Tax Accounting	4 units
BADM-104	Business Communications	3 units
or		
BADM-104H	Honors Business Communications	3 units
BADM-150	Small Business Entrepreneurship	3 units
BADM-157	Principles of Salesmanship	3 units
BADM-170	Introduction to International Business	3 units
BADM-210	Principles of Advertising	3 units
ECON-202	Principles of Microeconomics	3 units
or		
ECON-202H	Honors Principles of Microeconomics	3 units
ENGR-108/MGT-108	Organizational Behavior	3 units
MGT-132	Labor Management Relations	3 units
MGT-133	Productivity Management	3 units
MGT-138	Personnel Management	3 units

Certificate in Small Business Operations *(24 units)*

Required Courses *(15 units)*

ACCT-124	Financial Accounting - Principles of Accounting I	3 units
or		
ACCT-124H	Honors Financial Accounting - Principles of Accounting I	3 units
BADM-150	Small Business Entrepreneurship	3 units
BADM-201	Legal Environment of Business	3 units
ECON-201	Principles of Macroeconomics	3 units
or		
ECON-201H	Honors Principles of Macroeconomics	3 units
MGT-205	Principles of Marketing Management	3 units

Elective Courses *(9 units)*

ACCT-125	Managerial Accounting - Principles of Accounting II	3 units
or		
ACCT-125H	Honors Managerial Accounting - Principles of Accounting II	3 units
ACCT-126	Beginning Computer Accounting	3 units
BADM-157	Principles of Salesmanship	3 units
BADM-170	Introduction to International Business	3 units
BADM-210	Principles of Advertising	3 units
CSIS-101	Introduction to Computers and Data Processing	3 units
ECON-202	Principles of Microeconomics	3 units
or		
ECON-202H	Honors Principles of Microeconomics	3 units
ENGR-108/MGT-108	Organizational Behavior	3 units
MGT-103	Introduction to Management	3 units
or		
MGT-103H	Honors Introduction to Management	3 units
MGT-132	Labor Management Relations	3 units
MGT-138	Personnel Management	3 units

Certificate in Business, Clerical (25 units)

Required Courses (16 units)

BADM-085	Business Math	3 units
BADM-104	Business Communications	3 units
or		
BADM-104H	Honors Business Communications	3 units
CAPP-127	Using Microsoft Word	3 units
OTEC-131	Filing Techniques	1 unit
OTEC-144	Keyboarding and Document Formatting	3 units
OTEC-178	Office Procedures and Systems	3 units

Elective Courses (9 units)

ACCT-076	Bookkeeping Part 1 - Accounting Theory	3 units
ACCT-077	Bookkeeping Part 2 - QuickBooks Pro	3 units
CAPP-120	Using Microsoft Office – Level 1	3 units
CAPP-122	Using Microsoft Excel	3 units
CAPP-123	Using Microsoft Access – Level 1	3 units
CAPP-124	Using Microsoft PowerPoint	3 units
OTEC-095/ENGL-095		
	Business English	3 units
OTEC-146	Keyboarding Speed and Accuracy	2 units
OTEC-150	Records and Information Management	2 units
OTEC-180	Research Analysis and Presentation	3 units

Certificate in Business, Office Administration Technician (24 units)

Required Courses (24 units)

BADM-085	Business Math	3 units
BADM-103	Introduction to Business	3 units
or		
BADM-103H	Honors Introduction to Business	3 units
BADM-104	Business Communications	3 units
or		
BADM-104H	Honors Business Communications	3 units
CAPP-122	Using Microsoft Excel	3 units
CAPP-127	Using Microsoft Word	3 units
CSIS-101	Introduction to Computers and Data Processing	3 units
OTEC-178	Office Procedures and Systems	3 units
OTEC-180	Research Analysis and Presentation	3 units

Certificate in Microsoft Applications Specialist (18 units)

Required Courses (18 units)

CAPP-122	Using Microsoft Excel	3 units
CAPP-123	Using Microsoft Access – Level 1	3 units
CAPP-124	Using Microsoft PowerPoint	3 units
CAPP-127	Using Microsoft Word	3 units
CAPP-131	Using Microsoft Outlook	1 unit
OTEC-144	Keyboarding and Document Formatting	3 units
OTEC-146	Keyboarding Speed and Accuracy	2 units

Certificate in Management/Supervision (24 units)

Required Courses (15 units)

BADM-103	Introduction to Business	3 units
or		
BADM-103H	Honors Introduction to Business	3 units
BADM-201	Legal Environment of Business	3 units
ECON-201	Principles of Macroeconomics	3 units
or		
ECON-201H	Honors Principles of Macroeconomics	3 units
MGT-103	Introduction to Management	3 units
or		
MGT-103H	Honors Introduction to Management	3 units

MGT-108/ENGR-108		
	Organizational Behavior	3 units

Recommended Elective Courses (3 units from this list)

ACCT-124	Financial Accounting - Principles of Accounting I	3 units
or		
ACCT-124H	Honors Financial Accounting - Principles of Accounting I	3 units
CSIS-101	Introduction to Computers and Data Processing	3 units

Other Elective Courses (6 units from this list)

ACCT-125	Managerial Accounting- Principles of Accounting II	3 units
or		
ACCT-125H	Honors Managerial Accounting- Principles of Accounting II	3 units
BADM-150	Small Business Entrepreneurship	3 units
BADM-157	Principles of Salesmanship	3 units
BADM-170	Introduction to International Business	3 units
ECON-202	Principles of Microeconomics	3 units
or		
ECON-202H	Honors Principles of Microeconomics	3 units
MGT-132	Labor Management Relations	3 units
MGT-133	Productivity Management	3 units
MGT-138	Personnel Management	3 units
MGT-205	Principles of Marketing Management	3 units
MGT-299	Special Projects: Management	1-3 units

Certificate in Real Estate (24 units)

Required Courses (12 units)

RE-140	Real Estate Principles	3 units
RE-141	Real Estate Practice	3 units
RE-142	Legal Aspects of Real Estate	3 units
RE-143	Real Estate Finance	3 units

Elective Courses (12 units)

ACCT-124	Financial Accounting - Principles of Accounting I	3 units
or		
ACCT-124H	Honors Financial Accounting - Principles of Accounting I	3 units
BADM-201	Legal Environment of Business	3 units
RE-144	Basic Appraisal Principles and Procedures	3.5 units

RE-145	Real Estate Economics	3 units
RE-146	Mortgage Loan Brokering and Lending	3 units
RE-149	Occupational Internship: Real Estate	1-4 units
RE-154	Property Management	3 units

DEGREES

Business Administration Major (18 units)

The 18 units in the major plus all MSJC General Education Option A requirements for a total of 60 units is required to earn a non-transfer Associate in Science degree in Business Administration.

Required Courses (6 units)

ACCT-124	Financial Accounting - Principles of Accounting I	3 units
or		
ACCT-124H	Honors Financial Accounting - Principles of Accounting I	3 units
ECON-201	Principles of Macroeconomics	3 units
or		
ECON-201H	Honors Principles of Macroeconomics	3 units

Additional Required Courses (9 units from this list)

BADM-103	Introduction to Business	3 units
or		
BADM-103H	Honors Introduction to Business	3 units
BADM-201	Legal Environment of Business	3 units
MGT-103	Introduction to Management	3 units
or		
MGT-103H	Honors Introduction to Management	3 units
MGT-205	Principles of Marketing Management	3 units

Electives (3 units from this list)

ACCT-125	Managerial Accounting - Principles of Accounting II	3 units
or		
ACCT-125H	Honors Managerial Accounting - Principles of Accounting II	3 units
ACCT-127	Federal and California Income Tax Accounting	4 units
BADM-104	Business Communications	3 units
or		
BADM-104H	Honors Business Communications	3 units
BADM-150	Small Business Entrepreneurship	3 units
ECON-202	Principles of Microeconomics	3 units
or		
ECON-202H	Honors Principles of Microeconomics	3 units
FIN-200	Financial Management	3 units

A.S.-T in Business Administration for Transfer (25-26 units)

An Associate in Science degree in Business Administration for Transfer will fulfill the requirements for students to transfer to a four-year college or university as a Business Administration major.

The major required for an A.S.-T in Business Administration for Transfer may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

Required Courses (15 units)

ACCT-124	Financial Accounting - Principles of Accounting I	3 units
or		
ACCT-124H	Honors Financial Accounting - Principles of Accounting I	3 units
ACCT-125	Managerial Accounting - Principles of Accounting II	3 units
or		
ACCT-125H	Honors Managerial Accounting - Principles of Accounting II	3 units
ECON-201	Principles of Macroeconomics	3 units
or		
ECON-201H	Honors Principles of Macroeconomics	3 units
ECON-202	Principles of Microeconomics	3 units
or		
ECON-202H	Honors Principles of Microeconomics	3 units
BADM-201	Legal Environment of Business	3 units

Additional Required Courses

List A (4 units from this list)

MATH-135	Calculus for Social Science and Business	4 units
MATH-140	Introduction to Statistics	4 units

List B (6-7 units from this list)

Any course from List A not already used above can be selected.

MATH-135	Calculus for Social Science and Business	4 units
MATH-140	Introduction to Statistics	4 units
CSIS-101	Introduction to Computers and Data Processing	3 units
BADM-103	Introduction to Business	3 units
or		
BADM-103H	Honors Introduction to Business	3 units

Units for Major	**25-26**
CSU General Education or IGETC Pattern	**34-35**
Possible double counting	**10**
Transferable Electives (as needed to reach 60 CSU transferable units)	
Total Units for A.S.-T Degree	**60 units**

This Associate in Science in Business Administration for Transfer degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A student completing this degree is guaranteed admission to the CSU system, but not a particular campus or major. Students should meet with a counselor to develop an educational plan and receive university admission and transfer requirements.

A.S. in Office Administration (18 units)

The 18 units in the major plus all MSJC General Education Option A requirements for a total of 60 units is required to earn an Associate in Science degree in Office Administration.

Required Courses *(12 units)*

BADM-104	Business Communications	3 units
or		
BADM-104H	Honors Business Communications	3 units
CAPP-127	Using Microsoft Word	3 units
OTEC-178	Office Procedures and Systems	3 units
OTEC-180	Research Analysis and Presentation	3 units

Elective Courses *(6 units)*

ACCT-076	Bookkeeping Part 1 - Accounting Theory	3 units
ACCT-077	Bookkeeping Part 2 - QuickBooks Pro	3 units
CAPP-120	Using Microsoft Office – Level 1	3 units
CAPP-122	Using Microsoft Excel	3 units
CAPP-123	Using Microsoft Access – Level 1	3 units
CAPP-124	Using Microsoft PowerPoint	3 units
CAPP-131	Using Microsoft Outlook	1 unit
CAPP-140	Using Microsoft Office – Level 2	3 units
CSIS-103	Introduction to the Internet	3 units
MGT-103	Introduction to Management	3 units
or		
MGT-103H	Honors Introduction to Management	3 units

A.S. in Management/Supervision

An Associate in Science (AS) degree with a major in Management/ Supervision is available to students completing the certificate requirements in Management/Supervision, and completing all other MSJC General Education Option A requirements. The course requirements for the Certificate in Management/Supervision are listed under Certificates heading.

A.S. in Real Estate

An Associate in Science degree in Real Estate is available to students completing the 24 unit certificate in Real Estate and completing all other MSJC General Education Option A requirements for a total of 60 units. See a counselor for recommended vocational and academic courses. The course requirements for the certificate in Real Estate are listed under the Certificates heading.

EMPLOYMENT CONCENTRATIONS

Certificate classes must be completed within a two-year period to be valid. Certificate is valid for two years after issuance. Students must complete an employment concentration certificate application form (available in the Business Department office) after completion of all certificate classes in order to receive certificate.

Business Administration

Project Management Concentration *(9 units)*

CAPP-135	Using Microsoft Project	3 units
MGT-103	Introduction to Management	3 units
or		
MGT-103H	Honors Introduction to Management	3 units
MGT-133	Productivity Management	3 units

Real Estate

Real Estate Appraisal *(9 units)*

RE-144	Basic Appraisal Principles and Procedures	3.5 units
RE-155	Residential Real Estate Appraisal	3.5 units
RE-156	Residential Appraisal Report Writing	1 unit

CAREER OPPORTUNITIES

Account Manager	Management Analyst
Administrative Assistant	Office Manager
Bank Teller	Purchasing Manager
Chief Operating Office	Real Estate Appraiser
Construction Manager	Real Estate Salesperson
Data Entry Operator	Small Business Managers
Executive Secretary	Tax Preparer

Health, Science and Medical Technology: Programs and courses available for this industry sector at Mt. San Jacinto College are provided by our Nursing and Allied Health Unit. These programs include:

Alcohol and Drug Studies

Allied Health

    Certified Nursing Assistant (CNA)

    Emergency Medical Technician (EMT)

Diagnostic Medical Sonography (DMS)

Medical Assistant

Nursing: Registered Nursing

Alcohol/Drug Studies:

The Alcohol/Drug studies non-transfer certificate and degree program is designed to prepare people to serve as professionals in the expanding profession of counseling to those who individuals who suffer from addictions from alcohol or other drugs.

The MSJC Alcohol/Drug program is a certificate program consisting of 37.5 units, drawing from a course list which provides a thorough grounding in medical and social origins of addiction. The successful student will be well prepared for the qualifying examination offered by California Board for Alcohol and Drug Abuse Counselors (CBADAC), a statewide certification organization.

ALLIED HEALTH

CNA

This non-transfer program introduces students to the basic information and nursing skills needed to pass the state exam required for Nurse Aide Certification.

EMT

This non-transfer program provides the knowledge and skills required to care for the ill or injured person(s) in the pre-hospital care setting. It is also a first step for those individuals who would prefer to work in an emergency room as an emergency room technician. Students are taught how to perform a complete patient assessment and provide multiple life saving interventions based on their assessment of the ill or injured patient. This course is primarily taken by individuals who intend to work in the field of prehospital emergency medicine and with critically ill or injured patients.

This course can also be taken by individuals currently working in a similar medical employment within the medical field and there may be potential for salary and/or career advancement. Individuals who wish to take this course must have a criminal free background due to licensing restrictions imposed by national, state and local licensing agencies. The potential student must be 18 years of age. Hospital clinical and field internship hours are required. This course is a positive attendance course due to national, state and local mandates.

Diagnostic Medical Sonography:

The Diagnostic Medical Sonography Program is a non- transfer program. This degree program provides an opportunity for student to be educated and trained the healthcare career of Diagnostic Medical Sonography. The objective of the program is to graduate students who are competent and confident in providing excellent patient care in the field of sonography.

The goal of our DMS program is to graduate students who demonstrate a high competency in anatomy and pathology, as seen on the ultrasound exam and the skills necessary to perform the ultrasound exam. Students will be evaluated on didactic learning in Ultrasound Physics and Instrumentation, hands on scanning skills, communication skills, patient care and critical thinking ability.

Students will practice ultrasound scanning skills with ultrasound equipment in the campus lab. Those skills will be carried out and enhanced in an affiliated medical center by training on the job, scanning patients.

The didactic education will prepare the student for taking the American Registry of Diagnostic Medical Sonography Physics and Instrumentation examination. After graduation the student will be required to work an additional year in the sonography field before taking the ARDMS specialty examination.

With completion of Associate in Science required course work the student will receive an Associate in Science in Diagnostic Medical Sonography.

Nursing:

Registered Nursing: The Associate in Science degree in Registered Nursing provides courses that are transferable to four year colleges and universities. The program is accredited by the California State Board of Registered Nursing. Graduates are eligible to take the National Council Licensure Examination (NCLEX). The program pass rates are consistently above the state and national averages.

The Associate in Science degree in Nursing is a 78-unit degree program which requires four semesters (40 units in nursing) of study beyond completion of prerequisite courses. In addition, Mt San Jacinto College offers a LVN-RN articulation option for completion of the Associate in Science degree in Nursing or a non-degree 30-unit option.

DEGREES

Alcohol/Drug Studies

In addition to the 37.5 units of the certificate program, students must complete all MSJC General Education Option A requirements for the Associate in Science degree in Alcohol/Drug Studies.

Diagnostic Medical Sonography

The 60 units list below plus all MSJC General Education Option A requirements is required to earn an Associate in Science degree in Diagnostic Medical Sonography. See counselor for recommended vocational and academic courses.

Program Prerequisites: 20 units

ANAT-101	Human Anatomy & Physiology I	5 units
ANAT-102	Human Anatomy & Physiology II	5 units
COMM-103	Interpersonal Communication	3 units
or		
COMM-103H	Honors Interpersonal Communication	3 units
MATH-090	Elementary Algebra	4 units
(or higher)		
PHY-100	Conceptual Physics	3 units

DMS Program Courses *(60 units)*

Semester One: 13 units

DMS-095	Sonography Medical Terminology	3 units
DMS-100	Fundamentals of Diagnostic Medical Sonography	2 units
DMS-101	Pathophysiology	3 units
DMS-103	Patient Care Techniques for Sonographers	3 units
DMS-125	Ultrasound Physics and Instrumentation I	2 units

Semester Two: 13.5 units

DMS-102	Sonography Medical Ethics	3 units
DMS-104	Clinical Observation	2 units
DMS-110	Sectional Imaging	2 units
DMS-120	Abdomen Scanning	1.5 units
DMS-122	Ultrasound Pathology I	3 units
DMS-135	Ultrasound Physics and Instrumentation II	2 units

Summer: 5 units

DMS-114	Clinical Experience I	5 units

Semester Three: 16.5 units

DMS-124	Clinical Experience II	10 units
DMS-130	Obstetric/Gynecology Scanning	1.5 units

DMS-132	Ultrasound Pathology II	3 units
DMS-140	Introduction to Vascular Scanning	2 units

Semester Four: 12 units

DMS-134	Ultrasound Seminar	2 units
DMS-136	Clinical Experience III	10 units

The sonography courses must be taken in a specific sequence; students must attain a minimum grade of "C" and a GPA of 2.5 or above in all required courses in order to obtain the degree.

Nursing: Registered Nursing

A.S. in Nursing *(78 units)*

Minimum cumulative college level GPA of 2.5 on 4.0 scale with a grade of "C" or better in the following courses:

Admission Requirements:

Pre-Nursing Information Workshop Certificate

High School graduate (or equivalency)

Prerequisites: 24 units

ANAT-101	Human Anatomy & Physiology I *(A)*	5 units
ANAT-102	Human Anatomy & Physiology II *(A)*	5 units
BIOL-125	Microbiology *(A)*	5 units
or		
BIOL-125H	Honors Microbiology *(A)*	5 units
ENGL-101	Freshman Composition *(D1)*	4 units
or		
ENGL-101H	Honors Freshman Composition *(D1)*	4 units
MATH-096	Intermediate Algebra *(G)*	5 units

Semester One: 12 units

NURS-071	Foundations of Nursing Skills Lab	0.5 unit
NURS-194	Pharmacology & Dosage Calculations for Nurses	3.5 units
NURS-212	Foundations of Nursing	4 units
NURS-214	Introduction to Medical-Surgical Nursing I	4 units

Semester Two: 12.5 units

NURS-072	Basic Medical Surgical Nursing Skills Lab	0.5 unit
NURS-222	Nursing Care of Children & Families	3.5 units
NURS-224	Beginning Medical-Surgical Nursing II	5 units
NURS-226	Nursing of Childbearing & Families	3.5 units

Semester Three: 10.5 units

NURS-073	Intermediate Nursing Skills Lab	0.5 unit
NURS-234	Intermediate Medical-Surgical Nursing III	5 units
NURS-236	Mental Health Nursing	3 units
NURS-238	Gerontology and Community Nursing	2 units

Semester Four: 7 units

NURS-074	Advanced Nursing Skills Lab	0.5 units
NURS-244	Advanced Medical-Surgical Nursing IV	4 units
NURS-248	Preceptorship *(5 wks)*	2.5 units

Additional Associate Degree and Requirements: *(12 units)*

PSYC-101	Introduction to Psychology	3 units
or		
PSYC-101H	Honors Introduction to Psychology	3 units
PS-101	Introduction to American Government and Politics	3 units
or		
PS-101H	Honors Introduction to American Government and Politics	3 units
COMM-100	Public Speaking	3 units

or
COMM-100H Honors Public Speaking   3 units
or
COMM-103 Interpersonal Communication   3 units
or
COMM-103H Honors Interpersonal Communication   3 units

Humanities/Multicultural Gender Studies (Any course from Area C
 (Humanities) or Area F (Multicultural Gender Studies)

Many courses will satisfy both requirements: *(3 units)*

(See the MSJC General Education Breadth Pattern)

Note: Graduates from the A.S. in Nursing Program meet the requirement of
Physical Education and Healthful Living.

LVN to RN Transition
[Degree/Non-Degree Candidate]

Students choosing this option are Licensed Vocational Nurses (LVN's)
or Licensed Practical Nurses (LPN's) who would be eligible to enter
the third semester of the Associate in Science in Nursing program after
completing the recommended LVN to RN Transition courses. Students
can opt to meet all of the requirements for the Associate in Science in
Nursing degree (degree candidate) or to satisfy the course requirements
for only those courses that are required by the California State Board
of Registered Nursing as content required for RN licensure (non-degree
candidate). Students can apply for advanced placement if he/she has
completed courses at another college. Students will be admitted once a
year in the fall semester.

LVN to RN Transition [Degree Candidate]

Admission Requirements:

30.5 units of course work

Prerequisites:

(For admission into the third semester of the program)

Minimum cumulative college level GPA of 2.5 on 4.0 scale with a grade
of "C" or better in the following courses:

Required Prerequisites *(30.5 units)*

ANAT-101	Human Anatomy & Physiology I	5 units
ANAT-102	Human Anatomy & Physiology II	5 units
BIOL-125	Microbiology	5 units
or		
BIOL-125H	Honors Microbiology	5 units
ENGL-101	Freshman Composition	4 units
or		
ENGL-101H	Honors Freshman Composition	4 units
MATH-096	Intermediate Algebra	5 units
NURS-072	Basic Medical Surgical Nursing Skills Lab	0.5 units
NURS-232	Role Transition	3 units
PSYC-101	Introduction to Psychology	3 units
or		
PSYC-101H	Honors Introduction to Psychology	3 units

LVN, licensed in California or proof of LVN program graduate awaiting
licensure.

3rd Semester *(10.5 units):*

NURS-073	Intermediate Nursing Skills Lab	0.5 units
NURS-234	Intermediate Medical-Surgical Nursing III	5 units
NURS-236	Mental Health Nursing	3 units
NURS-238	Gerontology and Community Nursing	2 units

4th Semester *(7 units):*

NURS-074	Advanced Nursing Skills Lab	0.5 units
NURS-244	Advanced Medical-Surgical Nursing IV	4 units
NURS-248	Preceptorship	2.5 units

Additional Associate Degree and Requirements: *(9 units)*

Political Science 101 *(B1)*	3 units
Communication 100 or 103 *(D2)*	3 units

Humanities/Multicultural Gender Studies *(Any course from Area C
        (Humanities) or Area F (Multicultural Gender Studies)*

Many courses will satisfy both requirements: 3 units

(See the MSJC General Education Breadth Pattern)

Note: Graduates from the A.S. in Nursing Program meet the requirement of
Physical Education and Healthful Living.

LVN to RN [30 Unit Non-Degree Option]

Students choosing this option are Licensed Vocational Nurses (LVN's)
or Licensed Practical Nurses (LPN's) who would be eligible to enter the
third semester of the program after the LVN to RN Transition course
(NURS-232). Students can opt to meet all of the requirements of the
Associate Degree in Science in Nursing degree (degree candidate) or to
satisfy the course requirements for only those courses that are required
by the California Board of Registered Nursing as the content required for
RN licensure (non-degree candidate). Students can apply for advanced
placement into the LVN-RN option if he/she has completed courses at
another college. This student will be required to satisfy 30-semester units
in nursing and physical sciences in order to qualify them to apply for RN
licensure in California. **This option is recognized only in the state of
California.** Students will be admitted once a year in the fall semester.

Admission Requirements:

High School graduate (or equivalent)

Prerequisites:

Minimum cumulative college level GPA of 2.5 on 4.0 scale with a
minimum grade of "C" in the following courses:

ANAT-104	Survey of Human Anatomy and Physiology	5 units
BIOL-125	Microbiology	5 units
or		
BIOL-125H	Honors Microbiology	5 units
NURS-072	Basic Medical Surgical Nursing Skills Lab	.5 unit
NURS-232	Role Transition	3 units

LVN, licensed in California or proof of awaiting licensure.

Note: Special Projects (299's) can be arranged for individuals who have
exceeded the 7 year recency requirements for ANAT-101, ANAT-102, and
BIOL-125.

EMPLOYMENT CONCENTRATIONS*

Alcohol/Drug Studies

Dual Diagnosis (13-16 units)

ADS-137	Co-Occurring Disorders	3 units
ADS-149	Occupational Internship: Alcohol and Drug Studies	1-4 units
ADS-150	Supervised Field Work Practicum	3 units
PSYC-101	Introduction to Psychology	3 units
or		
PSYC-101H	Honors Introduction to Psychology	3 units
PSYC-108	Abnormal Psychology	3 units
or		
PSYC-108H	Honors Abnormal Psychology	3 units

Allied Health

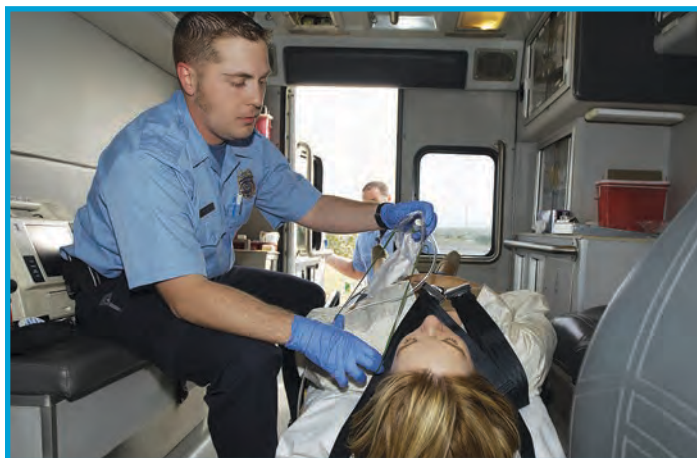#### Certified Nursing Assistant/Home Health Aide (7.5 units)

NURS-085	Certified Nursing Assistant and Home Health Aide	7.5 units

Emergency Medical Technician (EMT) (13.5 units)

EMS-120	Emergency Medical Technician	6 units
AH-120B	Advanced Emergency Medical Technician	5 units
EMS-121	Emergency Medical Technician (Refresher)	2.5 units

Emergency Medical Technician (EMT) Advanced (8 units)

EMS-120B	Emergency Medical Technician Support Course	5 units
EMS-127	Infant to Adult Basic and Advanced Life Support	3 units

Nursing Courses

3rd Semester:

NURS-234	Intermediate Medical-Surgical Nursing III	5 units
NURS-236	Mental Health Nursing	3 units
NURS-238	Gerontology and Community Nursing	2 units

4th Semester:

NURS-244	Advanced Medical-Surgical Nursing IV	4 units
NURS-248	Preceptorship	2.5 units

CERTIFICATES

Certificate in Alcohol/Drug Studies (37.5 units)

In addition to the course work below, certificate recipients must demonstrate English proficiency by passing ENGL-098 or ENGL-092 or ESL-098W or higher or achieve an equivalent assessment score and pass MATH-051 or higher or achieve an equivalent assessment score.

Required Courses (37.5 units)

ADS-101	Foundations of Alcohol and Drug Studies	2.5 units
ADS-102	Pharmacology and Biomedical Aspects of Alcohol and Other Drugs	2.5 units
ADS-103	Law and Ethics	2.5 units
ADS-104	Case Management	3 units
ADS-105	Domestic Violence Prevention	2 units
ADS-110	Introduction to Counseling	3 units
ADS-115	Individual, Family and Group Counseling	3 units
ADS-120	Personal and Professional Development	3 units
ADS-149	Occupational Internship: Alcohol and Drug Studies	1 unit
ADS-150	Supervised Field Work Practicum	3 units
HS-121	Fundamentals of Healthful Living	3 units
PSYC-101	Introduction to Psychology	3 units
or		
PSYC-101H	Honors Introduction to Psychology	3 units
PSYC-102	Personal Growth	3 units
SOCI-106	Intercultural Relations	3 units

CAREER OPPORTUNITIES

Alcohol/Drug Intern	Hospital Attendant
Ambulance Service	Nurse's Aide
Diagnostic Medical Sonographer	Nursing Assistant
Emergency Room Technician	Registered Nurse
Fire Service	

The Hospitality, Tourism, and Recreation sector provides students with the academic and technical preparation to pursue high-demand and high-skill careers in these related and growing industries. The sector encompasses three distinct, yet interrelated, career pathways: Food Science, Dietetics, and Nutrition; Food Service and Hospitality; and Hospitality, Tourism, and Recreation. Nearly 900,000 jobs are directly supported by the travel industry, making tourism the state's third largest employer; and the industry is expected to expand by more than 2% per year through 2014. Travel spending in 2012 generated $2.5 billion in local taxes and $4.1 billion in state taxes. The foundation standards include core, comprehensive technical knowledge and skills that prepare students for learning in the pathways. The knowledge and skills are acquired within a sequential, standards-based pathway program that integrates hands-on and project- and work-based instruction as well as internship, community classroom, work experience, apprenticeship, and cooperative career technical education. Standards included in the Hospitality, Tourism, and Recreation sector are designed to prepare students for technical training, postsecondary education, and entry to a career.

Viticulture, Enology and Winery Technology:

The Viticulture, Enology and Winery Technology is a program that introduces the student to a variety of disciplines included in the winemaking industry. From basic winemaking (enology), grape cultivation (viticulture), event organization and service (hospitality) to marketing and selling of wine (business principles). This program seeks to inform the student at an introductory level to the many fields encompassing the winery industry.

Students can put their knowledge and skills to work in the local Temecula Valley Wine Country which is home to 35 wineries that offer hundreds of award-winning wines. Whether you are looking to enjoy a quick day-trip or stay for a few days, Temecula Valley Wine Country will be sure to meet your expectations. You can wine taste, tour a vineyard, stay at a bed and breakfast or enjoy live entertainment such as a jazz concert. Individuals who are social and enjoy customer service will find many opportunities for employment in the Valley.

LEARNING OUTCOMES

- Define and understand viticulture terminology and identify morphology
- Identify and understand the difference between grape species including Vitis vinifera and hybrids
- Describe modern vine training and trellis systems and how they impact vine growth and management
- Understand the causes of poor fruit set and berry development
- Define vine balance and understand the link between reproductive and vegetative potential of the vine on end fruit quality
- Identify site characteristics needed for successful commercial winegrape production based on vine physiology
- Interpret information learned in lecture for use in critical thinking during discussion and journal article review

EMPLOYMENT CONCENTRATION

Viticulture, Enology and Winery Technology (12 units)

VEW-100	Introduction to Viticulture	3 units
VEW-102	Introduction to Enology	3 units
VEW-106	Hospitality in the Winemaking Industry	3 units
VEW-108	Introduction to Winery Business Principles	3 units

CAREER OPPORTUNITIES

Formal Waiter/Waitress

Head Waiter/Waitress

Host/Hostess

Restaurant Host/Hostess

Wine Sommelier

Wine Steward

Winery Production Worker

Technology and the growing complexity of businesses have expanded the need for employees who can analyze, design, and manage information. Skills for evaluating data, the ability to work with people, and clear communication are companion components for careers in information technology systems. Employment opportunities for technically and professionally trained persons are outstanding in this emerging career path. Computers and information technology touch almost every aspect of our lives. It can help us from everything to driving a car, communicating with loved ones and diagnosing diseases. To keep all of these systems running smoothly, large, highly-skilled workforces is necessary. Unlike many other industries, the information technology sector was not significantly affected by the recession. In fact, the high demand for services provided by workers in this industry has created numerous fast-growing and high paying IT jobs. Projected job growth in this industry is expected to be much faster than average compared with other industry sectors.

Computer Information Systems:

Computer Information Systems are the tools that facilitate the effective and efficient transformation of data into information. MSJC's CIS program is designed to provide students with the knowledge and skills required to gain entry level employment as computer programmers, and/or software/system administration technicians. Our coursework is designed to provide students with the knowledge and hands-on experience in microcomputer applications, programming, operating systems, and networking necessary to be competitive in the work force. The non-transfer program in Computer Information Systems offers students an opportunity to earn a CIS Associate degree, State Approved Certificate, or locally approved Employment Concentration. The program offers students the choice of pursuing an Associate in Science (A.S.) degree in Computer Information Systems or certificate(s) with emphasis in General Track, Internet Authoring, Networking and Programming. The program also offers a transfer preparation. The courses offered will transfer to California State University/University of California systems, and other four year colleges.

These programs offer students a well-equipped technical environment for instruction and lab. CIS courses are taught in computer equipped classrooms, allowing hands-on experience in the use of industry-standard hardware, application software, operating systems, networking, and programming tools.

Individuals pursuing employment in this industry should have strong computer skills, be critical thinkers, active listeners, be able to write computer programs and have strong problem solving skills.

DEGREES

Computer Science

The curriculum in Computer Science is designed to provide the transfer student the opportunity to earn an Associate in Science in Computer Science for Transfer degree. Computer Science is the study of computers, their design, and their uses for computation, data processing, and systems control, including design and development of computer hardware and software, and programming. Computer Science provides a foundation of knowledge for students with career objectives in a wide range of computing and computer-related professions.

The major required for an A.S.-T in Computer Science for Transfer may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.
- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.
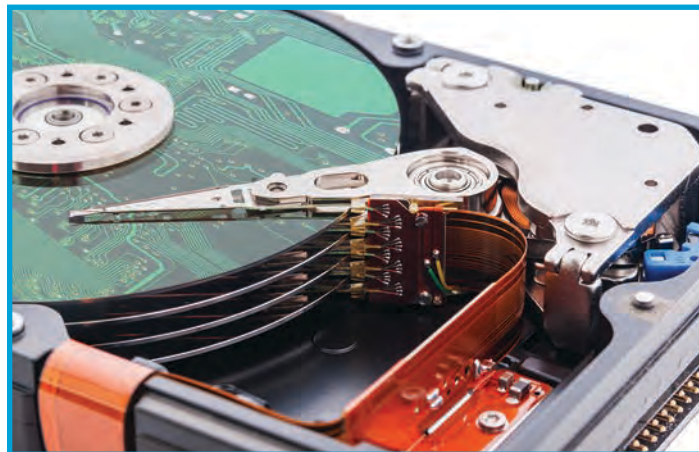
A.S.-T in Computer Science for Transfer (28 units)

Required Core *(28 units)*

CSIS-113A	C++ Programming – Level 1	3 units
or		
CSIS-113B	Java Programming – Level 1	3 units
CSIS-118B	Computer Organization & Assembly Language	3 units
CSIS-211	Introduction to Data Structures and Algorithms	3 units
CSIS-213	Discrete Structures	3 units
MATH-211	Analytic Geometry and Calculus I	5 units
MATH-212	Analytic Geometry and Calculus II	5 units
or		
MATH-212H	Honors Analytic Geometry and Calculus II	5 units
PHY-201	Mechanics and Wave Motion	4 units
PHY-202	Electricity and Magnetism	4 units
or		
PHY-202H	Honors Electricity and Magnetism	4 units

Units for Major	**30**
CSU General Education or IGETC Pattern	37
Possible double counting	7
Transferable Electives (as needed to reach 60 CSU transferable units)	
Total Units for A.S.-T Degree	**60 units**

This Associate in Science in Computer Science for Transfer degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A student completing this degree is guaranteed admission to the CSU system, but not a particular campus or major. Students should meet with a counselor to develop an educational plan and receive university admission and transfer requirements.

Computer Information Systems

An Associate degree in CIS may be earned by completing a CIS State Certificate in General Track, Internet Authoring, Programming, or Networking (18 units) as well as all MSJC General Education Option A requirements.

CERTIFICATES

General Track (18 units)

Required Courses (15 units)

CSIS-101	Introduction to Computers and Data Processing	3 units
CSIS-103	Introduction to the Internet	3 units
CSIS-201	System Analysis and Design	3 units
CSIS-202	Networks and Data Communications	3 units
CSIS-214	Principles of Database Management Systems	3 units

Elective Courses (3 units)

CAPP-122	Using Microsoft Excel	3 units
CAPP-123	Using Microsoft Access – Level 1	3 units
CAPP-135	Using Microsoft Project	3 units

Internet Authoring (18 units)

Required Courses (15 units)

CSIS-103	Introduction to the Internet	3 units
CSIS-114A	SQL Programming – Level 1	3 units
CSIS-115A	Web Development – Level 1	3 units
CSIS-116B	Developing ASP.NET Web Applications	3 units
or		
CSIS-116D	PHP Web Development	3 units
CSIS-125A	Web Development – Level 2	3 units

Elective Courses (3 units)

CSIS-104	Introduction to E-Commerce Infrastructure	3 units
CSIS-113B	Java Programming – Level 1	3 units
CSIS-113C	C# Programming – Level 1	3 units
CSIS-115B	XML Design – Level 1	3 units
CSIS-116E	Python Programming – Level 1	3 units
CSIS-117D	Using Microsoft Expression Web – Level 1	3 units
CSIS-124A	SQL Programming – Level 2	3 units

Networking (18 units)

Required Courses (9 units)

CSIS-101	Introduction to Computers and Data Processing	3 units
CSIS-201	System Analysis and Design	3 units
CSIS-202	Networks and Data Communications	3 units
or		
NET-100	Network Fundamentals	3 units

Elective Path (9 units)

Select a Path:

Cisco Path

NET-101	Routing Protocols and Concepts	3 units
NET-102	LAN Switching and Wireless	3 units
NET-103	Accessing the WAN	3 units

Unix/Linux Path

CSIS-153	Using Unix-Based Operating Systems	3 units
CSIS-223A	Linux System Administration – Level 1	3 units
CSIS-233A	Linux System Administration – Level 2	3 units

Windows Path

CSIS-150	Using Microsoft Windows	3 units
CSIS-151	Using the OS Command Line Interface	3 units
CSIS-154	Using and Configuring Windows Operating Systems	3 units

Programming (18 units)

Required Courses (6 units)

CSIS-118B	Computer Organization & Assembly Language	3 units
CSIS-201	System Analysis and Design	3 units

Programming Elective Courses (6 units)

Select a Level 1 & Level 2 course from the same language

CSIS-113A	C++ Programming – Level 1	3 units
CSIS-113B	Java Programming – Level 1	3 units
CSIS-116E	Python Programming – Level 1	3 units
CSIS-123A	C++ Programming – Level 2	3 units
CSIS-123B	Java Programming – Level 2	3 units
CSIS-126E	Python Programming – Level 2	3 units

Additional Elective Courses (6 units)

CSIS-111B	Fundamentals of Computer Programming	3 units
CSIS-113C	C# Programming – Level 1	3 units
CSIS-114A	SQL Programming – Level 1	3 units
CSIS-115A	Web Development – Level 1	3 units
CSIS-116B	Developing ASP.NET Web Applications	3 units
CSIS-116D	PHP Web Development	3 units
CSIS-118A	Embedded Systems Programming	3 units
CSIS-123C	C# Programming – Level 2	3 units
CSIS-124A	SQL Programming – Level 2	3 units
CSIS-125A	Web Development – Level 2	3 units
CSIS-211	Introduction to Data Structures and Algorithms	3 units
CSIS-214	Principles of Database Management Systems	3 units
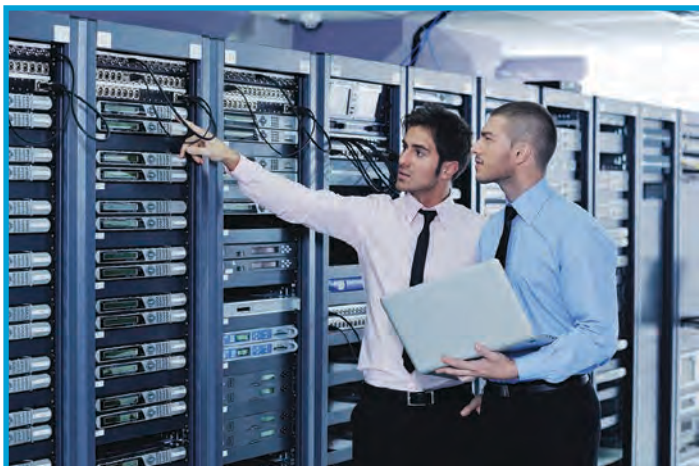
EMPLOYMENT CONCENTRATIONS

Computer Forensics *(16 units)*

AJ-103	Criminal Evidence	3 units
AJ-105	Public Safety Report Writing	3 units
AJ-108	Criminal Investigation	3 units
CSIS-181	Computer Hardware – Level 1	4 units
CSIS-182	Computer Forensics	3 units

Computer Hardware Specialist Certification *(12 units)*

This program of study prepares students for A+ industry certification. In order to obtain that certificate students must take the CompTIA exam. Students can register for these exams at http://www.2test.com and testing facilities are available on campus.

CSIS-151	Using the OS Command Line Interface	3 units
CSIS-154	Using and Configuring Windows Operating Systems	3 units
CSIS-181	Computer Hardware – Level 1	4 units
CSIS-183	Green Computing	2 units

Data Analysis and Modeling *(9 units)*

CAPP-122	Using Microsoft Excel	3 units
CAPP-123	Using Microsoft Access – Level 1	3 units
CAPP-143	Using Microsoft Access – Level 2	3 units

Internet Authoring Apprentice *(9 units)*

Note: A cumulative GPA of 2.0 or higher is required for these courses.

Foundation Layer *(3 units)*

CSIS-103	Introduction to the Internet	3 units

Presentation Layer *(3 units)*

CSIS-115A	Web Development – Level 1	3 units
or		
CSIS-117D	Using Microsoft Expression Web – Level 1	3 units

Interactive Layer *(3 units)*

CSIS-119A	ActionScript Programming – Level 1	3 units
or		
CSIS-125A	Web Development – Level 2	3 units

Internet and Web Technologies *(15 units)*

This program of study prepares students for inet+ industry certification. In order to obtain that certificate students must take the CompTIA exams. Students can register for these exams at http://www.2test.com and testing facilities are available on campus.

CSIS-103	Introduction to the Internet	3 units
CSIS-104	Introduction to E-Commerce Infrastructure	3 units
CSIS-115A	Web Development – Level 1	3 units
CSIS-125A	Web Development – Level 2	3 units
CSIS-202	Networks and Data Communications	3 units

CAREER OPPORTUNITIES

Computer Forensic Investigators

Computer Repairer

Computer Systems Analyst

Help Desk Technician

Network Control Technician

Service Desk Hardware Support

Software Engineer

Technical Support Specialist

Web Developer

Web Publisher

The U.S. Bureau of Labor Statistics projects increases in employment nationwide through 2014 for careers pathways in the Public Services industry sector. The Public Services sector provides a foundation for secondary students in government, public administration, public safety, legal, and human services. Students engage in an instructional program that integrates academic and technical preparation and focuses on career awareness, career exploration, and skill preparation in the industry.

The sector encompasses three career pathways: Human Services, Legal and Government Services, and Protective Services. These pathways emphasize processes, systems, and services related to serving the public's interest. The knowledge and skills are acquired within a sequential, standards-based pathway program that integrates classroom, laboratory, and project- and work-based instruction as well as internship, community classroom, work experience, and cooperative career technical education. Standards included in the Public Services sector are designed to prepare students for technical training, postsecondary education, and entry to a career.

Programs and courses are available at Mt. San Jacinto College include Administration of Justice, Fire Technology and Legal Assistant/Paralegal.

If you like to serve and protect people, a career path in the Public Services – Protective Services Industry Sector may be for you. Explore some great opportunities below! Individuals should have strong integrity and ethics, work well under stress and fund purpose in serving and helping others

Administration of Justice: The scope of the program in administration of justice and corrections is designed to prepare the student for entry into careers in the criminal justice system. The program provides the student with a basic understanding of a variety of criminal justice positions at the federal, state, county and municipal level. The course of study involves an introduction to law enforcement, criminal law and evidence, juvenile and criminal procedures, public safety report writing, traffic control, community relations, criminal investigations, correctional courses, vice and narcotics control. These courses provide the student with a base of knowledge that will serve them well regardless of the criminal justice field they choose, i.e., police officer, deputy sheriff, corrections, FBI and civilian support.

For individuals currently working in the field there may be potential for salary and/or career advancement. Many agencies require entry level and current personnel to possess a certain level of education to be hired or to be eligible for promotion. The Certificate/Associate degree (AS) provide that level of education.

Fire Technology: The non-transfer Certificate/Associate degree (AS) in Fire Technology involves the study of fire behavior, protection and control techniques which for individuals currently working within these fields, there may be potential for salary and/or career advancement. This program prepares the student for an entry-level career in the fire service by providing a foundation of core concepts, practices, vocabulary, culture, safety and requirements for the fire service. This program is designed to prepare students for the entry-level career in public or private fire protection agencies, to survey career options, and to upgrade fire personnel. This program follows the Fire and Emergency Services Higher Education (FESHE) model from the National Fire Academy in Emmetsburg, Maryland and is a component of accreditation from the California State Fire Training.

Legal Assistant: The non-transfer Certificate/Associate in Science (AS) degree program in Legal Assistant studies is designed to prepare students for a paraprofessional career in generalized or specialized areas of paralegal services. This program provides the student with the theoretical knowledge and practical skills necessary to enter the job market as a legal assistant in private law offices, government agencies or corporations. A legal assistant works under the direction of an attorney in performing legal services to meet the client's needs. The Associate in Science degree provides students with the educational foundation helpful for transfer to a baccalaureate pre-law program or related field of study.

Although most employers do not require certification, earning a voluntary certification from a professional society may offer advantages in the labor market. The National Association of Legal Assistants (NALA), for example, has established standards for certification requiring a combination of education and experience. Paralegals who meet those standards are eligible to take a two-day examination given by NALA. Those who pass the exam will earn a Paralegal Certification

DEGREES

Administration of Justice Transfer A.S. Degree(s)

Transfer A.S. Degree(s)

An Associate in Science in Administration of Justice for Transfer will fulfill the requirements for students to transfer to a CSU institution as an Administration of Justice or Criminal Justice major. The courses in the A.S.-T in Administration of Justice for Transfer degree allow for the development of depth in one of the subject's substantive subsystems (i.e. law enforcement, juvenile, courts or corrections). The main objective is to familiarize students with the processes involved in the interaction of the criminal justice system as a whole.

The major requirements for an A.S.-T in Administration of Justice for Transfer to CSU may be met by:

- Completion of 60 semester units or 90 quarter units that are eligible for transfer to the California State University.

- The Intersegmental General Education Transfer Curriculum (IGETC) or the California State University General Education-Breadth Requirements.
- A minimum of 18 semester units or 27 quarter units in a major or area of emphasis, as determined by the community college district.
- Obtainment of a minimum grade point average of 2.0.

A.S.-T in Administration of Justice for Transfer (18 units)

Required Core *(6 units)*

AJ-101	Criminal Law	3 units
AJ-102	Introduction to Criminal Justice	3 units

List A: Select two *(6 units)*

AJ-103	Criminal Evidence	3 units
AJ-106	Juvenile Procedures	3 units
AJ-108	Criminal Investigation	3 units
AJ-111	Criminal Procedures	3 units
AJ-118	Community and the Justice System	3 units
CORR-101	Introduction to Correctional Science	3 units

List B: Select two *(6 units)*

Any course from List A not used above or the following:

MATH-140	Introduction to Statistics	4 units
PSYC-101	Introduction to Psychology	3 units
or		
PSYC-101H	Honors Introduction to Psychology	3 units
PS-101	Introduction to American Government and Politics	3 units
or		
PS-101H	Honors Introduction to American Government and Politics	3 units

Units for Major	**18**
CSU General Education or IGETC Pattern	37-39
Possible double counting	12
Transferable Electives *(as needed to reach 60 CSU transferable units)*	
Total Units for A.S.-T Degree	**60 units**

This Associate in Science in Administration of Justice for Transfer degree is intended for students who plan to complete a bachelor's degree in a similar major at a CSU campus. A student completing this degree is guaranteed admission to the CSU system, but not a particular campus or major. Students should meet with a counselor to develop an educational plan and receive university admission and transfer requirements.

Non-Transfer A.S. Degree(s)

In addition to completing the certificate program, students MUST complete all other MSJC General Education Option A requirements for the Associate in Science degree in Administration of Justice.

Fire Technology

Students wishing to obtain the Associate in Science (AS) degree should complete the required core courses (18 units) and two additional elective courses (6 units) in the Fire Technology program to establish a major (24 units total). In addition to the 24 units of the certificate program, students must complete all the MSJC General Education Option A requirements for the Associate in Science (AS) degree in Fire Technology

Legal Assistant

In addition to the 27 units of the certificate program, students must complete all of the MSJC General Education Option A requirements for the Associate in Science (AS) Legal Assistant degree.

CERTIFICATES

Certificate in Administration of Justice (24 units)

A certificate will be issued for completion of five core courses and three elective courses for a total of 24 units. Students may submit a student petition to enrollment services to substitute credit for completion of a P.O.S.T. Basic Peace Officers Academy through an accredited institution. Students must attach official college transcripts and an academy course outline or syllabus to the student petition. The Administration of Justice Department Chair will determine the amount of credit to award the student. Four Administration of Justice courses must be completed at MSJC to earn a certificate.

Required Courses *(15 units)*

AJ-101	Criminal Law	3 units
AJ-102	Introduction to Criminal Justice	3 units
AJ-106	Juvenile Procedures	3 units
AJ-111	Criminal Procedures	3 units
AJ-118	Community and the Justice System	3 units

Elective Courses *(9 units)*

AJ-103	Criminal Evidence	3 units
AJ-105	Public Safety Report Writing	3 units
AJ-108	Criminal Investigation	3 units
AJ-109	Interview and Interrogation Techniques	1.5 units
AJ-110	Crime Scene Sketching and Note Taking	1.5 units
AJ-112	Introduction to Criminology	3 units
AJ-115	Introduction to Probation and Parole	3 units
AJ-125	Vice and Narcotics Control	3 units
AJ-128	Traffic Control, Enforcement and Investigation	3 units
AJ-149	Occupational Internship: Administration of Justice	1-4 units
AJ-299	Special Projects: Administration of Justice	1-3 units
CORR-101	Introduction to Correctional Science	3 units

Certificate in Fire Technology (24 units)

Required Core Courses *(18 units)*

FIRE-101	Introduction to Fire Technology	3 units
FIRE-102	Fundamentals of Fire Prevention	3 units
FIRE-106	Fundamentals of Fire Behavior and Combustion	3 units
FIRE-109	Fundamentals of Fire Protection and Equipment	3 units

FIRE-115	Building Construction for Fire Protection	3 units
FIRE-122	Principles of Fire and Emergency Services Safety and Survival	3 units

Elective Courses *(6 units)*

EMS-120	Emergency Medical Technician	6 units
FIRE-103	Fire Hydraulics	3 units
FIRE-107	Fire Apparatus and Equipment	3 units
FIRE-108	Fundamentals of Fire Investigation	3 units
FIRE-117	Hazardous Materials First Responder Operational	1 unit
FIRE-121	Fundamentals of Wild Land Fire Fighting	3 units
FIRE-149	Occupational Internship: Fire Technology	1-4 units
FIRE-299	Special Projects: Fire Technology	1-3 units

Certificate in Legal Assistant (27 units)

Core Courses *(18 units)*

LEG-100	Foundations of the Legal System	3 units
LEG-104	Law Office Management	3 units
LEG-105	California Civil Procedure	3 units
LEG-107	Research and Writing for Legal Assistant	3 units
LEG-112	Administrative Law	3 units
LEG-160	Business Organizations	3 units

Elective Courses *(9 units)*

AJ-101	Criminal Law	3 units
LEG-103	Elder Law	3 units
LEG-124	Immigration Law	3 units
LEG-134	Family Law	3 units
LEG-140	Bankruptcy Law	3 units
LEG-149	Occupational Internship: Legal Assistant	3 units
LEG-150	Probate Law and Procedures	3 units

EMPLOYMENT CONCENTRATIONS

Administration of Justice

Computer Forensics (16 units)

AJ-103	Criminal Evidence	3 units
AJ-105	Public Safety Report Writing	3 units
AJ-108	Criminal Investigation	3 units
CSIS-181	Computer Hardware – Level 1	4 units
CSIS-182	Computer Forensics	3 units

Corrections (15 units)

CPOST (Correctional Peace Officer Standards and Training) has developed a recommended pattern of classes that would benefit correctional peace officer apprentices. Students completing these classes may receive a higher application score when applying for positions within the Department of Corrections.

Required Courses *(12 units)*

AJ-105	Public Safety Report Writing	3 units
CORR-101	Introduction to Correctional Science	3 units
CORR-102	Control and Supervision in Corrections	3 units
CORR-103	Correctional Interviewing and Counseling	3 units

Elective Courses *(3 units)*

AJ-101	Criminal Law	3 units
CORR-104	Legal Aspects of Corrections	3 units

Fire Technology

Fire Academy Preparation (9 units)

Students completing this certificate will have completed the material required to apply for entrance into a Fire Academy. Some Academies may have additional requirements such as passing a physical abilities test. For specific requirements and further information, contact the Fire Academy you wish to attend.

EMS-120	Emergency Medical Technician	6 units
FIRE-101	Introduction to Fire Technology	3 units

Fire Apparatus Operator Preparation (9 units)

Students completing this certificate will have completed the courses to prepare them to operate fire apparatus.

FIRE-101	Introduction to Fire Technology	3 units
FIRE-103	Fire Hydraulics	3 units
FIRE-107	Fire Apparatus and Equipment	3 units

Legal Assistant

Legal Office Support (12 units)

Required Courses *(9 units)*

CAPP-127	Using Microsoft Word	3 units
LEG-100	Foundations of the Legal System	3 units
LEG-104	Law Office Management	3 units

Elective Courses *(3 units)*

BADM-201	Legal Environment of Business	3 units
LEG-103	Elder Law	3 units
LEG-105	California Civil Procedure	3 units
LEG-134	Family Law	3 units

CAREER OPPORTUNITIES

Air Marshal	Highway Patrol Officer
Animal Control Officer	Immigration Inspector
Coroner's Assistant	Investigator
Correctional Officers	Paralegal, Legal Assistant
Crime Laboratory Technician	Polygraph Examiner
Customers Inspector	Probation Officers
FBI Agent	Security Guard
Firefighter	US Marshal

Transportation

The Transportation sector is designed to provide a foundation in transportation services for all industrial technology education students in California. The pathways emphasize real-world, occupationally relevant experiences of significant scope and depth in Aviation and Aerospace Transportation Services, Collision Repair and Refinishing, and Vehicle Maintenance, Service, and Repair. Careers in the Transportation Industry are projected to grow is projected to grow by 1.1 million between 2004 and 2014. The industry is looking for younger workers that have strong technical skills like those learned in a community college program. In the past, a high school education was sufficient to gain employment in this industry; however, increased competition has created a need for job seekers to have at least some college education.

The standards are designed to integrate academic and technical preparation and focus on career awareness, career exploration, and skill preparation in the three pathways. Integral components include classroom, laboratory, hands-on contextual learning, and project- and work-based instruction as well as internship, community classroom, cooperative career technical education, and leadership development. The Transportation sector standards prepare students for continued training, postsecondary education, and entry to a career.

Automotive/Transportation Technology Program:

Automotive Technology is a career oriented non-transfer occupational program that prepares students to work in today's highly automated repair shops, and provides the background for career advancement in the automotive industry. Students get hands-on training and instruction in automotive repair and maintenance. Our Automotive Technology program prepares students for employment in many areas of the automotive field including dealerships, independent garages, fleet shops, service stations, and specialty shops.

DEGREE

A.S. in Automotive/Transportation Technology

The major for an Associate in Science (AS) degree in Automotive/Transportation Technology may be met by completing the certificate in the Automotive/Transportation program. In addition, students must complete all MSJC General Education Option A requirements for the Associate in Science degree in Automotive/Transportation Technology.

CERTIFICATE

Certificate in Automotive/Transportation Technology (20 units)

Required Courses (20 units)

AUME-100	Basic Auto Mechanics	4 units
AUME-119	Automotive Brake Systems	4 units
AUME-120	Automotive Suspension, Steering and Alignment Systems	4 units
AUME-122	Engine Performance I	4 units
AUME-126	Automotive Electrical/Electronics I	4 units

EMPLOYMENT CONCENTRATIONS

Automotive Emission Technician (12 units)

AUME-110	Basic and Advanced Clean Air Car Course	6 units
AUME-111	Emission Controls A6/A8/L1	6 units

Engine Performance Technician (14 units)

AUME-111	Emission Controls A6/A8/L1	6 units
AUME-123	Engine Performance II	4 units
AUME-127	Automotive Electrical/Electronics II	4 units

General Technician (17 units)

AUME-118	Heating/Air Conditioning Systems	4 units
AUME-124	Engine Theory and Repair	5 units
AUME-175	Automatic Transmissions & Transaxles	4 units
AUME-185	Manual Transmissions & Transaxles	4 units

Honda Fast Track (6 units)

AUME-101	Maintenance Light Repair I	2 units
AUME-109	Basic Maintenance Light Repair II	4 units

CAREER OPPORTUNITIES

Automotive Service Technician and Mechanic

Electrical/Electronics Installer and Repairer

First-Line Supervisor

Heating and Air Conditioning

Light Repair Tech

Manager of Mechanics

Porter Express

Refrigeration Mechanic

NOTES

A CTE Success Story...

"Building Up S.T.E.A.M." Middle School Summer Camp

Building Up STEAM
MSJC
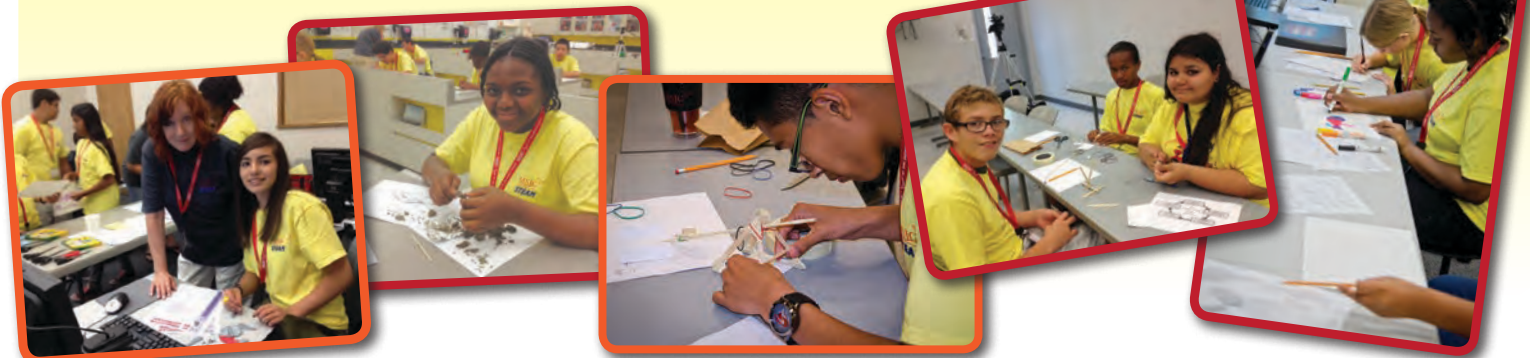Science · Technology · Engineering · Art · Math

June 2014

Science
Technology
Engineering
Art/Design
Mathematics

Camp Focus:
- Career Awareness
- Hands-on Activities
- Transition to High School
- Personal Student Inventories
- Socialization & Building Self-esteem
- Teamwork

Funded by Career & Technical Education
SB70 Collaborative Pathways Grant

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Menifee Valley Campus

28237 La Piedra Road, Menifee, CA 92584

(951) 672-MSJC (6752)

San Jacinto Campus

District Headquarters

1499 N. State Street, San Jacinto, CA 92583

(951) 487-MSJC (6752)

San Gorgonio Pass Campus

3144 W. Westward Avenue, Banning, CA 92220

(951) 922-1327

Temecula Education Complex

27447 Enterprise Circle West, Temecula, CA 92590

(951) 506-MSJC (6752)

Temecula Higher Education Center

43200 Business Park Drive, Temecula, CA 92590

(951) 506-MSJC (6752)