

# Transfer Center

## Mission Statement

The mission of the Los Medanos College Transfer Center is to continually increase student transfer rates from LMC to four-year colleges/universities. It is the Transfer Center's primary function to ensure that all students have access to necessary transfer information and provide programs and services needed for a successful transition. The Transfer Center works to inform students through outreach, programs, and services to increase their awareness of the opportunities and resources available to achieve student success and transfer, and to assist students in successfully completing their transfer goals.

## PSLOs

Students who participate in an application workshop will:

1. Increase their knowledge of the university (CSU/UC/Private) transfer admissions application process.
2. Be able to define the minimum eligibility requirements for transfer to the UC and CSU systems.

Students who participate in university tours will:

1. Increase their knowledge of the application process, their major and the campus culture of the universities they visit.
2. Be able to make a decision about whether or not to apply to the universities they visit.

## DEGREES AND CERTIFICATES IN MAJOR PROGRAMS

# Administration of Justice

## ASSOCIATE OF SCIENCE

### Administration of Justice

1. Be academically prepared to obtain an entry-level or mid-level position within the Criminal Justice System.
2. Apply critical thinking to research evaluate, analyze and synthesize criminal justice information.
3. Demonstrate the skills and knowledge necessary to take and pass local, state, and federal law enforcement entry level examination or career advancement examinations.
4. Appropriately apply the hands-on and technological skills necessary to succeed in the field of criminal justice.
5. Demonstrate excellent communication skills (oral and/or written) that need to be demonstrated in these carried professions.
6. Demonstrate professional and ethical responsibility in their decisions.

## CERTIFICATE OF ACHIEVEMENT

### Basic Law Enforcement Academy – Intensive

The student learning outcomes or competencies that students will fulfill by successfully completing the certificate program in Basic Law Enforcement Academy are as follows:

1. Be academically prepared to obtain an entry-level or midlevel position within the Criminal Justice System.

2. Apply critical thinking to research, evaluate, analyze and synthesize criminal justice information.
3. Demonstrate the skills and knowledge necessary to take and pass local, state, and federal law enforcement entry level examination or career advancement examinations.
4. Appropriately apply the hands-on and technological skills necessary to succeed in the field of criminal justice.
5. Demonstrate excellent communication skills (oral and/or written) that need to be demonstrated in these carried professions.
6. Demonstrate professional and ethical responsibility in their decisions.

## CERTIFICATE OF ACHIEVEMENT

### Basic Law Enforcement Academy - Intermediate

The student learning outcomes or competencies that students will achieve by successfully completing the certificate program in Basic Law Enforcement Academy- Intermediate are as follows:

1. Be academically prepared to obtain an intermediate-level reserve position within the Criminal Justice System.
2. Apply critical thinking to research evaluate, analyze and synthesize criminal justice information.
3. Demonstrate the skills and knowledge necessary to take and pass local, state, and federal law enforcement reserve entry level examinations.
4. Appropriately apply intermediate level hands-on and technological skills necessary to succeed in the field of criminal justice.
5. Demonstrate excellent communication skills (oral and/or written) that need to be demonstrated in these carried professions.
6. Demonstrate professional and ethical responsibility in their decisions.

## CERTIFICATE OF ACHIEVEMENT

### Basic Law Enforcement Academy - Advanced

The student learning outcomes or competencies that students will achieve by successfully completing the certificate program in Basic Law Enforcement Academy - Advanced are as follows:

1. Be academically prepared to obtain an advanced-level reserve or entry-level position within the Criminal Justice System.
2. Apply critical thinking to research evaluate, analyze and synthesize criminal justice information.
3. Demonstrate the skills and knowledge necessary to take and pass local, state, and federal law enforcement entry level examinations.
4. Appropriately apply advanced level hands-on and technological skills necessary to succeed in the field of criminal justice.
5. Demonstrate excellent communication skills (oral and/or written) that need to be demonstrated in these varied professions.
6. Demonstrate professional and ethical responsibility in their decisions.

Upon successful completion of the program, the student is prepared to pursue further professional development as a peace officer.

## Anthropology

### ASSOCIATE OF ARTS

#### Anthropology Degree

1. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.
2. Think critically and creatively.
3. Possess a worldview informed by diverse social, multicultural and global perspectives.

## Appliance Service Technology

### ASSOCIATE OF SCIENCE

#### Appliance Service Technology Degree

Demonstrate problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.

1. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
2. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.
3. Demonstrate skills needed for entry level employment in the appliance field by passing an industry employment test (Certified Appliance Professional) and obtaining a job in that field.

### CERTIFICATE OF ACHIEVEMENT

#### Appliance Service Technology Tech I

1. Demonstrate problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.
2. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.

### CERTIFICATE OF ACHIEVEMENT

#### Appliance Service Technology Tech II

1. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
2. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.
3. Demonstrate skills needed for entry level employment in the appliance field by passing an industry employment test (Certified Appliance Professional) and obtaining a job in that field.

### COLLEGE SKILLS CERTIFICATE

#### Appliance Service Technology Heating, Ventilation & Air Conditioning Specialist

1. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.

2. Demonstrate problem solving techniques used in troubleshooting appliances and make an estimate of what will have to be done to complete the repair.

### COLLEGE SKILLS CERTIFICATE

#### Appliance Service Technology Electrical Appliance Technician

1. Use written or oral service directions used in the appliance field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.

### COLLEGE SKILLS CERTIFICATE

#### Appliance Service Technology Refrigeration Technician

1. Demonstrate the skills and knowledge necessary to take and pass the federal EPA exam required for employment in the Appliance field.

## Art

### ASSOCIATE OF ARTS

#### Fine Arts Degree

1. Demonstrate appropriate studio practices
2. Present, explain and justify their design solutions using the vocabulary of art and design
3. Research and use examples of historical and cultural products to inform their creative process

### ASSOCIATE OF ARTS

#### Graphic Communications Degree

1. Demonstrate appropriate graphic design and computer studio practices
2. Present, explain and justify their graphic design solutions using the vocabulary of art and design
3. Research and use examples of historical and cultural products to inform their creative process in graphic design

### CERTIFICATE OF ACHIEVEMENT

#### Graphic Communications

1. Demonstrate appropriate graphic design and computer studio practices
2. Present, explain and justify their graphic design solutions using the vocabulary of art and design
3. Research and use examples of historical and cultural products to inform their creative process in graphic design

## Automotive Technology

### ASSOCIATE OF SCIENCE

#### Automotive Technology Degree

1. Demonstrate problem solving techniques used in troubleshooting automotive systems by writing up a diagnosis and completing the repair.
2. Use written or oral service directions used in the automotive field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.

3. Demonstrate the skills and knowledge necessary to take and pass the state and ASE exams required for employment in the automotive field.

### **CERTIFICATE OF ACHIEVEMENT**

#### **Automotive Technology**

1. Demonstrate problem solving techniques used in troubleshooting automotive systems by writing up a diagnosis and completing the repair.
2. Use written or oral service directions used in the automotive field to locate service information, demonstrate mechanical knowledge by diagnosing the failure and replacing the proper component.
3. Demonstrate the skills and knowledge necessary to take and pass the state and ASE exams required for employment in the automotive field.

### **COLLEGE SKILLS CERTIFICATE**

#### **Automotive Technology Smog Technician Specialist**

1. Demonstrate the skills and knowledge necessary to take and pass the State smog license and ASE exam (A 6, A 8 & L 1) required for employment in the automotive field.

### **COLLEGE SKILLS CERTIFICATE**

#### **Automotive Technology Air Conditioning Specialist**

1. Demonstrate the skills and knowledge necessary to take and pass the State refrigerant handling license and ASE exam (A 6) required for employment in the automotive field.

### **COLLEGE SKILLS CERTIFICATE**

#### **Automotive Technology Transmission Specialist**

### **COLLEGE SKILLS CERTIFICATE**

#### **Automotive Technology Engine Performance Specialist**

1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A2 & A3) required for employment in the automotive field.

### **COLLEGE SKILLS CERTIFICATE**

#### **Automotive Technology Engine Repair & Machining Specialist**

1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A1) required for employment in the automotive field.

### **COLLEGE SKILLS CERTIFICATE**

#### **Automotive Technology Automotive Chassis Specialist**

1. Demonstrate the skills and knowledge necessary to take and pass the ASE exam (A4 & A5) required for employment in the automotive field.

## **Biology**

### **ASSOCIATE OF SCIENCE**

#### **Biology Degree**

1. Utilize the scientific method to develop hypotheses, conduct scientific experiments, critically analyze experimental data, and communicate results through written reports and oral presentations.
2. Identify and/or describe the correlation between structure and function in living organisms including the functional roles of the internal and external structures of cells, the basic relationship between DNA, proteins, and the transmission of traits, and the similarities and differences between metabolic processes and structures of diverse living organisms that allow them to exhibit distinctive characteristics of life.
3. Explain how evolution provides a framework for understanding the unity, diversity, and interdependency of living organisms.
4. Evaluate aspects of ecology and the interactions among the life forms on Earth - including the implications of human economic and cultural practices on the Earth's natural resources. Ultimately students will comprehend the numerous ethical implications and applications of bioscience concepts in their everyday lives.

## **Business**

### **ASSOCIATE IN ARTS**

#### **Business Administration for Transfer Degree**

1. Analyze practical business problems and utilize research and critical thinking to evaluate and recommend alternative solutions.
2. Demonstrate strong oral and written skills necessary to effectively collaborate and communicate from a global perspective with diverse groups of people.
3. Apply accounting concepts and principles in making decisions about business operations.
4. Identify and explain the major functional areas of the business organizations including management, marketing, finance, and accounting.
5. Apply commonly used computer application programs to create relevant business documents.

## **Communications**

### **ASSOCIATE IN ARTS**

#### **Communications for Transfer Degree**

1. Be academically prepared to transfer to a communication program at a four-year university.
2. Demonstrate the ability to critically listen and analyze speech performances for their logical soundness, elements of proof and delivery.
3. Create and perform a presentation with the appropriate digital and physical materials to support the performance.

# Chemistry

## ASSOCIATE OF SCIENCE

### Chemistry Degree

1. Applied scientific methodology, in all its explicit steps, to either:
  - solve a complex problem posed in the classroom, or
  - complete a significant laboratory analysis, or
  - carry out an extensive study at one of LMC's field stations.
2. Solved problems concerning the atomic and molecular structure of matter, using the periodic table plus quantum mechanics as the organizing and predictive models for this analysis.
3. Solved stoichiometric problems, including those complicated by the presence of limiting reagents.
4. Correctly predicted the products of standard inorganic, organic, biochemical, or nuclear reactions.
5. Applied the principles of thermodynamics and kinetics to solve problems:
  - involving energy and entropy changes characteristic of chemical and physical reactions
  - concerning rates and mechanisms of chemical reactions
  - involving the principles of equilibrium
6. Demonstrated an understanding of electromagnetic radiation (i.e., light energy) and its interactions with matter, by carrying out spectroscopic analyses of atoms and compounds.
7. Conducted laboratory or field analyses using modern, professional technologies, selected from colorimetric, titrimetric, gravimetric, electrochemical, spectrometric, and chromatographic equipment and instruments.
8. Engaged in at least one hands-on research or restoration activity at a field site of LMC or a community partner, in order to utilize the distinct opportunity provided by having the California Delta in our backyard, and to appreciate the effort needed to act as good stewards of our local watersheds.

# Computer Science

## ASSOCIATE OF SCIENCE

### Computer Science Degree

1. Analyze, define, and develop efficient computer code based on user requirements.
2. Investigate, troubleshoot and solve program deficiencies (bugs) in software code.
3. Prepare clear and accurate program documentation, procedures, report of work performed, and other written materials.

## ASSOCIATE OF SCIENCE

### Networking and Security Degree

1. Logically configure, troubleshoot, and support network operations.
2. Manage the network operating system, users, hardware, software, and resources.
3. Develop security policies consistent with current standards and then provide analysis of and document security and other network issues.

## CERTIFICATE OF ACHIEVEMENT

### Networking and Security (Advanced)

1. Logically configure, troubleshoot, and support network operations.
2. Manage the network operating system, users, hardware, software, and resources.
3. Develop security policies consistent with current standards and then provide analysis of and document security and other network issues.

## CERTIFICATE OF ACHIEVEMENT

### Networking and Security (Basic)

1. Provide technical support on hardware and software, and manage user resources on local area networks.
2. Provide analysis of and document security breaches and network issues.

## ASSOCIATE OF SCIENCE

### Computer Support Specialist Degree

1. Provide technical assistance and problem resolution to computer users regarding hardware, software, and networking issues.
2. Design and implement an information and communication Technology support system that includes a tracking system and documentation.
3. Support new installations, including hardware and software, peripherals, training policies and documentation.

## CERTIFICATE OF ACHIEVEMENT

### Computer Support Specialist - Advanced

1. Provide technical assistance and problem resolution to computer users regarding hardware, software, and networking issues.
2. Design and implement an information and communication technology support system that includes a tracking system and documentation.
3. Support new installations, including hardware and software, peripherals, training policies and documentation.

## CERTIFICATE OF ACHIEVEMENT

### Computer Support Specialist Basic

1. Provide technical assistance and problem resolution regarding hardware, software, and networking at the workstation level.
2. Maintain problem tracking software applications.

## CERTIFICATE OF ACHIEVEMENT

### Microcomputer Systems Specialist

1. Demonstrate technological proficiency with hardware, common operating systems and computer applications.
2. Demonstrate the ability to analyze problems and develop effective solutions including troubleshooting common hardware and software issues.
3. Be technologically proficient to obtain entry-level or mid-level positions and pass certification exams in the Information Technology industry.

# Child Development

## ASSOCIATE IN SCIENCE FOR TRANSFER

### Early Childhood Education Degree

1. Obtain, maintain and advance in permit licensure and/or prepare for upper division transfer through appropriate academic preparation.
2. Apply critical thinking to research, observe, assess, evaluate, and synthesize early learning and child development information.
3. Utilize effective written and verbal communication techniques to ensure optimum communication with children, families, and professional colleagues.
4. Select, develop and or use education equipment, curriculum, assessments, materials, technology, and environments that are culturally relevant and developmentally appropriate.
5. Demonstrate the skills and knowledge necessary to obtain employment or advancement in early care and education.

## CERTIFICATE OF ACHIEVEMENT

### Child Development

1. Obtain, maintain, and advance in permit licensure and/or prepare for upper division transfer through appropriate academic preparation.
2. Apply critical thinking and effective communication to research, observe, assess, evaluate, analyze, and synthesize early learning and child development information.
3. Select, develop, and/or use educational equipment, curriculum, assessments, materials, technology, and environments that are culturally, linguistically, and developmentally relevant and appropriate.

# Drama

## ASSOCIATE IN ARTS FOR TRANSFER

### Theatre Arts Degree

1. To analyze, dissect, and critically evaluate a script or theatrical event or film with working knowledge of its historical, cultural, and societal origins and contexts.
2. To use strongly developed physical, vocal, and emotional foundations to build a personalized acting process for approaching a text or character in order to effectively communicate on stage or in film.
3. To understand how and be able to write, produce, direct, manage, promote, and star in a theatrical event or film.

To be academically and fundamentally prepared to enter the entertainment industry or transfer to a 4-year theatre or film program, with an advanced standing.

## ASSOCIATE OF ARTS

### Acting Degree

1. To analyze, dissect, and critically evaluate a script or theatrical event or film with working knowledge of its historical, cultural, and societal origins and contexts.
2. To use strongly developed physical, vocal, and emotional foundations to build a personalized acting process for approaching a text or character in order to effectively communicate on stage or in film.

3. To describe the process and be able to write, produce, direct, manage, promote, and star in a theatrical event or film.
4. To be academically and fundamentally prepared to enter the entertainment industry or transfer to a 4-year acting or film program with an advanced standing.

# Electrical/Instrumentation Technology

## ASSOCIATE OF SCIENCE

### Electrical Technology Degree

### Instrumentation Technology Degree

## CERTIFICATE OF ACHIEVEMENT

### Electrical Technology

### Instrumentation Technology

1. Gain entry-level or mid-level employment in the electrical or instrumentation field.
2. Troubleshoot, analyze, operate, repair, and install electrical systems equipment.
3. Communicate the technical status of equipment in writing and verbally; be able to work and communicate with teams.
4. Safely use electrical or instrumentation test equipment. )
5. Demonstrate the operational concepts of equipment and technology used in the electrical or instrumentation field.
6. Demonstrate the skills and knowledge necessary to take and pass certification exams for career advancement in electrical or instrumentation fields.

# Engineering

## ASSOCIATE OF SCIENCE

### Engineering Degree

1. Apply knowledge of math, science, and engineering to identify, formulate, and solve engineering problems.
2. Design and perform experiments, as well as to analyze and interpret data.
3. Design a system, component, or process to meet desired needs.
4. Demonstrate professional ethical responsibility.
5. Communicate effectively and perform on multi-disciplinary teams.
6. Judge the effects of engineering projects on society and the environment.
7. Engage in life-long learning and explain contemporary issues.
8. Use the techniques, skills, and modern engineering tools necessary for engineering practice.

# Fire Service Technology

## ASSOCIATE OF SCIENCE

### Fire Technology Degree

1. Be academically prepared to demonstrate the skills necessary for entry-level positions in the Fire Service.
2. Apply critical thinking to research, evaluate, analyze and synthesize Fire Service information.

3. Demonstrate through written and oral communication skills a broad knowledge of fire technology as it applies to a career in the Fire Service.
4. Explain and interpret fire service terminology.
5. Demonstrate the skills and mechanical knowledge of Fire Service tools and equipment

#### **CERTIFICATE OF ACHIEVEMENT**

##### **Fire Technology**

1. Be academically prepared to demonstrate the skills necessary for entry-level positions in the Fire Service.
2. Apply critical thinking to research, evaluate, analyze and synthesize Fire Service information.
3. Demonstrate through written and oral communication skills a broad knowledge of Fire technology as it applies to a career in the Fire Service.
4. Explain and interpret Fire Service Terminology.
5. Demonstrate the skills and mechanical knowledge of Fire Service tools and equipment.

#### **COLLEGE SKILLS CERTIFICATE**

##### **Fire Protection**

1. Apply critical thinking to research, evaluate, analyze and synthesize Fire Service information.
2. Demonstrate through written and oral communication skills a broad knowledge of Fire technology as it applies to a career in the Fire Service.
3. Explain and interpret Fire Service Terminology.

#### **COLLEGE SKILLS CERTIFICATE**

##### **Fire Prevention**

1. Apply critical thinking to research, evaluate, analyze and synthesize Fire Service information.
2. Demonstrate through written and oral communication skills a broad knowledge of fire technology as it applies to a career in the Fire Service.

#### **COLLEGE SKILLS CERTIFICATE**

##### **Firefighter 1 Academy**

1. Be academically prepared to demonstrate the skills necessary for entry-level positions in the Fire Service.
2. Demonstrate through written and oral communication skills a broad knowledge of fire technology as it applies to a career in the Fire Service.
3. Demonstrate the skills and mechanical knowledge of Fire Service tools and equipment.

#### **ASSOCIATE IN SCIENCE**

##### **Kinesiology for Transfer Degree**

1. Demonstrate an understanding of the historical, ethical, and philosophical foundations of kinesiology.
2. Demonstrate knowledge of the relationship between physical activity and the conceptual foundations of kinesiology.

3. Identify career and/or educational options in kinesiology/physical education, and formulate an action plan to successfully pursue and attain those options.
4. Utilize critical thinking skills to identify research methods and apply them in an evaluative process to draw conclusions.

## Journalism

#### **ASSOCIATE OF ARTS**

##### **Journalism Degree**

1. Be academically prepared to transfer to a journalism program at a four-year university or to obtain an entry-level job in journalism or a related field.
2. Demonstrate the knowledge, attitudes and skills necessary for careers in journalism and related fields.
3. Possess a portfolio of published work suitable for internship/job applications and interviews.

## Liberal Arts

#### **ASSOCIATE OF ARTS**

##### **Arts and Humanities Degree**

#### **ASSOCIATE OF ARTS**

##### **Behavioral and Social Science Degree**

#### **ASSOCIATE OF ARTS**

##### **Math and Science Degree**

1. Read critically and communicate effectively as a writer and speaker.
2. Understand connections among disciplines and apply interdisciplinary approaches to problem solving.
3. Think critically and creatively
4. Consider the ethical implications inherent in knowledge, decision-making and action.
5. Possess a worldview informed by diverse social, multicultural and global perspectives.

## Mathematics

#### **ASSOCIATE OF SCIENCE**

##### **Mathematics Degree**

1. Preparation and mathematical maturity: Be prepared for the mathematical or statistical reasoning required in upper division work in their major, including the ability to generalize mathematical concepts and comprehend increasing levels of mathematical abstraction.
2. Mathematical literacy:  
Communicate using mathematics:
  - a. Read with comprehension documents having mathematical content and participate cogently in discussions involving mathematics;
  - b. Clearly articulate mathematical information accurately and effectively, using a form, structure and style that suit the purpose (including written and face-to-face presentation).

3. Problem-solving ability:
  - a. Reason with and apply mathematical concepts, principles and methods to solve problems or analyze scenarios in real-world contexts relevant to their major;
  - b. Use technology effectively to analyze situations and solve problems;
  - c. Estimate and check answers to mathematical problems in order to determine reasonableness, identify alternatives, and select optimal results.
4. Modeling ability:
  - a. Construct and interpret mathematical models using numerical, graphical, symbolic and verbal representations with the help of technology where appropriate in order to draw conclusions or make predictions;
  - b. Recognize and describe the limits of mathematical and statistical methods.
5. Effective learning skills:
  - a. Independently acquire further mathematical knowledge without guidance, take responsibility for their own learning, determine appropriateness and correctness of their own work and function effectively in different learning environments.
  - b. Succeed in different learning environments, particularly in a group setting of working collaboratively with others.

2. Have knowledge and understanding of the historical development of music, its historical periods, genres, instrumentation and composers, within their cultural context.
3. Have proficiency in solo repertoire and technical studies for the purpose of the art of teaching.
4. Apply the acquired information from this certificate towards potential employment, as a private music instructor.

**CERTIFICATE OF ACHIEVEMENT**

**Performance**

1. Understand and be able to apply the fundamentals of music theory, aural, and have a working knowledge of harmonic progression, musical forms and structures.
2. Have knowledge and understanding of the historical development of music, its historical periods, genres, instrumentation and composers, within their cultural context.
3. Have practical knowledge of performance practice in their particular ensemble performing styles.
4. Have proficiency of solo repertoire and technical studies in their major instrumental or vocal area of study.
5. Be able to work independently on varieties of musical problems by combining their capabilities in performance, aural, verbal and visual analysis, composition, repertoire, knowledge, and music history.
6. Apply the acquired information from this certificate towards potential employment, as a professional musical artist and performer, church musician, and studio musician.

**CERTIFICATE OF ACHIEVEMENT**

**Business Management**

1. Understand and be able to apply the fundamentals of music theory, aural, and have a working knowledge of harmonic progression, musical forms and structures.
2. Have practical knowledge of performance practice in their particular ensemble performing styles.
3. Have proficiency of solo repertoire and technical studies in their major instrumental or vocal area of study.
4. Have writing skills with the ability to independently utilize research tools and resources (library, internet, etc.).
5. Have abilities to understand and navigate music software programs.
6. Have proficiency in basic accounting, small business law, corporate law, entertainment law, state regulations, and artist management.
7. Apply the acquired information from this certificate towards potential employment as a small business owner, artist manager, music personnel manager, and music critic.

**Music**

**ASSOCIATE OF ARTS**

**Music Degree**

1. Understand and be able to apply the fundamentals of music theory, aural, and have a working knowledge of harmonic progression, musical forms and structures.
2. Have knowledge and understanding of the historical development of music, its historical periods, genres, instrumentation and composers, within their cultural context.
3. Have practical knowledge of performance practice in their particular ensemble performing styles.
4. Have proficiency of solo repertoire and technical studies in their major instrumental or vocal area of study.
5. Be competent with music technology in its various forms for composition, teaching and professional pursuits.
6. Be able to work independently on varieties of musical problems by combining their capabilities in performance, aural, verbal and visual analysis, composition, repertoire, knowledge, and music history.
7. Have writing skills with the ability to independently utilize research tools and resources (library, internet, etc.).

**CERTIFICATE OF ACHIEVEMENT**

**Pedagogy**

1. Understand and be able to apply the fundamentals of music theory, aural, and have a working knowledge of harmonic progression, musical forms and structures.

## Physics

### ASSOCIATE IN SCIENCE FOR TRANSFER

#### Physics Degree

1. Explain both the concerns and the main ideas of the major subfields of physics (including Mechanics, Waves and Optics, Electromagnetism, Thermodynamics and Statistical Physics, Quantum Mechanics, and other topics of Modern Physics).
2. Apply critical thinking skills to solve physics problems using theoretical, experimental, and computational techniques.
3. Explain how the ideas of physics apply to everyday situations encountered by individuals (e.g. How a heat engine works.) as well as issues facing society (e.g. How does global warming occur?).
4. Show how important physics ideas are represented, derived, and connected to each other through the language of mathematics.
5. Perform both qualitative and quantitative reasoning, along with knowledge of the relative magnitudes of physical quantities, to estimate the magnitude of certain effects upon the situation under study.
6. Design and perform simple experiments, interpret the results, and give estimates of uncertainties.
7. Synthesize multiple ideas of physics to solve problems.
8. Apply the ideas of physics to astronomy, chemistry, medicine, engineering and/or other disciplines.

## Psychology

### ASSOCIATE IN ARTS FOR TRANSFER

#### Psychology Degree

1. Utilize critical thinking skills to analyze, evaluate and make decisions regarding current issues in psychology.
2. Recognize the complexity of social, cultural and global diversity.
3. Demonstrate understanding of the major theoretical perspectives, concepts and research findings in the field of psychology.
4. Demonstrate an understanding of biological processes underlying behavior and experience.
5. Demonstrate knowledge of the principles of research and the ethical considerations in conducting research.

## Recording Arts

### ASSOCIATE OF ARTS

#### Recording Arts Degree

1. Be able to transfer to a 4-year recording industry program with advanced standing.
2. Be qualified for entry-level positions in the field.
3. Be positioned to begin entrepreneurial freelance work.

### CERTIFICATE OF ACHIEVEMENT

#### Recording Arts

1. Be able to transfer to a 4-year recording industry program with advanced standing.
2. Be qualified for entry-level positions in the field.
3. Be positioned to begin entrepreneurial freelance work.

## Nursing

### ASSOCIATE OF SCIENCE

#### Registered Nursing Degree

1. Be academically and clinically prepared to obtain employment as a neophyte registered nurse.
2. Apply the nursing process to research, evaluate, analyze, and synthesize information.
3. Utilize appropriate written and verbal communication techniques to ensure optimal communication with patients, family members, and other members of the healthcare team.
4. Implement nursing interventions utilizing current technology based upon scientific rationales.
5. Demonstrate skills and knowledge necessary to take and pass the National Council's Licensure Examination (NCLEX-RN).

### CERTIFICATE OF ACHIEVEMENT

#### Vocational Nursing

1. Be academically prepared to take and pass the NCLEX-PN examination for licensure as a licensed vocational nurse (LVN).
2. Be academically prepared to secure an entry-level position as a licensed vocational nurse (LVN).
3. Demonstrate theoretical knowledge and application of technical skills to obtain an entry-level position as a licensed vocational nurse (LVN).
4. Apply critical thinking skills in the care of medical/surgical, maternity, pediatric, and/or psychiatric clients in various clinical settings.
5. Utilize therapeutic communication skills (oral and written) in a clinical setting that assist the client and family to cope with and resolve problems.
6. Determine the effects of nursing interventions on the clients.



## Process Technology

**ASSOCIATE OF SCIENCE**  
Process Technology Degree

**CERTIFICATE OF ACHIEVEMENT**  
Process Technology

1. Be academically and experientially prepared to obtain an entry-level position in the chemical, refining, oil and gas production, water, waste management, food, and related manufacturing industries.
2. Apply critical thinking to research, evaluate, analyze and synthesize information to solve problems related to process equipment, instruments, systems, and operations within the chemical, refining, oil and gas production, water, waste management, food, and related manufacturing industries.
3. Demonstrate excellent communications skills (oral and written) to ensure optimal communication with shift co-workers, first line supervisors, maintenance personnel, safety personnel, contractors, and other members of the manufacturing site team.
4. Demonstrate knowledge of the process technology and apply the technical skills necessary to operate complex process equipment and systems such as distillation, fired boiler, refrigeration, cooling tower, reactor, and similar unit operations.

## Sociology

**ASSOCIATE IN ARTS FOR TRANSFER**  
Sociology Degree

1. Demonstrate an understanding of the major theoretical perspectives, concepts and research findings in the field of sociology.
2. Utilize critical thinking skills to analyze, evaluate and make decisions regarding current issues studied in the field of sociology.
3. Recognize the diversity of social, cultural and global perspectives.
4. Demonstrate knowledge of the principles of research and the ethical considerations involved in conducting research.
5. Understand how theoretical perspectives can explain both the causes and the solutions to social problems.

## Travel Marketing

**ASSOCIATE OF ARTS**  
Travel Degree

**CERTIFICATE OF ACHIEVEMENT**  
Travel

1. Applying critical thinking to research, evaluate, analyze, and synthesize travel-related information.
2. Demonstrating excellent communication skills as well as soft skills in a sales and business environment.
3. Demonstrating knowledge of current technologies and applying technological skills necessary to succeed in the travel industry.

## Welding Technology

**ASSOCIATE OF SCIENCE**  
Welding Technology Degree

1. Be able to know and specify the safety requirements and knowledge as required in the welding trade.
2. Demonstrate the ability and theory to effectively solve problems encountered while welding or cutting and perform in accordance with industry standards.
3. Be prepared to learn the step-by-step procedure to pass the AWS Welder Qualification/Certification Exam, essential for employment as a welder.

**CERTIFICATE OF ACHIEVEMENT**  
Welding Technology

1. Be able to know and specify the safety requirements and knowledge as required in the welding trade.
2. Demonstrate the ability and theory to effectively solve problems encountered while welding or cutting and perform in accordance with industry standards.
3. Be prepared to learn the step-by-step procedure to pass the AWS Welder Qualification/Certification Exam, essential for employment as a welder.

**COLLEGE SKILLS CERTIFICATE**  
Welding Pre-Apprenticeship

1. Be able to know and have an appreciation for the safety knowledge required in the welding trade.
2. Have a basic understanding how to solve common welding problems encountered in industry as well as reveal basic welding and cutting manipulative skills.