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# New Mexico State University Carlsbad

## 2015–2016 Catalog



Volume 63 • Number 1 • July 2015

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Academic programs at New Mexico State University Carlsbad are available to all students without regard to age, color, ancestry, disability, gender, national origin, race, religion, sexual orientation, or veteran status.

Any item in this catalog is subject to modification at any time by proper administrative procedure.

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# Welcome to NMSU Carlsbad



**W**elcome to the New Mexico State University at Carlsbad campus. I am extremely pleased that you are devoting your time and energy to researching the college's diversified events and programs. All of the NMSU Carlsbad staff is very proud of our college and we would relish the opportunity to have you join the college as a student or as an employee. As you peruse the information in the catalog, please be sure to pay particular attention to the variety and quality of associate degrees and certificates offered at the college. NMSU Carlsbad has experienced continuing growth over the past few semesters and the college plans to continue that growth by increasing course offerings and expanding dual credit, academic, and vocational programs.

NMSU Carlsbad was among the first community colleges in New Mexico, established in 1950 as the Carlsbad Instructional Center. In 1953 NMSU Carlsbad became a part of the NMSU system, which was at the time known as the College of Agriculture and Mechanical Arts. Since that date, NMSU Carlsbad has increased in size, currently serving more than

In order to accomplish this mission, quality must be stressed in all college operations and services. As a comprehensive community college, we strive to meet the needs of all of our service area constituents by providing a broad spectrum of resources including academic and vocational training, dual credit programs of study, non-credit continuing education training, workforce development and contract training, small business development assistance, and online learning programs. The college is committed to providing these opportunities which are vital to the success of Eddy County and southeastern New Mexico.

Thank you for visiting and please feel free to contact our HR Department at (575) 234-9208 or one of our Counseling and Student Development staff at (575) 234-9337 if you have any questions or need additional information.

A handwritten signature in black ink that reads "John B. Gratton". The signature is written in a cursive style.

**Dr. John Gratton**  
**President**



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**NEW MEXICO STATE UNIVERSITY CARLSBAD**

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Inquiries about New Mexico State University Carlsbad and requests for additional information are welcome.

Write or telephone: Office of Student Services

New Mexico State University Carlsbad, 1500 University Drive, Carlsbad, New Mexico 88220

Phone: (575) 234-9200, Toll Free: 1-888-888-2199, Fax: (575) 885-4951

Website: [carlsbad.nmsu.edu](http://carlsbad.nmsu.edu)

# General Information

## History of NMSU Carlsbad

New Mexico State University Carlsbad (NMSU Carlsbad) was established in 1950 as the State's first community college and was named the Carlsbad Instructional Center. Ten years later, the Center was renamed as a branch campus of New Mexico State University. In 1980, the campus was relocated to a new building, which was expanded with an additional wing of classrooms in 1987, and was expanded again by the addition of a computer facilities wing for occupation in 1996. The newest building, the allied health center was added in 2011.

Throughout its history, the campus has been responsive to the changing academic needs of the region and the immediate Carlsbad community. It has offered courses which apply directly to the University's Las Cruces campus for graduation at the baccalaureate level. Some upper-division and graduate courses are delivered by the University's Las Cruces faculty on-site at the Carlsbad campus.

## Vision Statement

New Mexico State University Carlsbad will be the foremost institution of higher education in southeastern New Mexico.

## Mission of the College

The mission of New Mexico State University Carlsbad is to provide access to quality educational opportunities and to support the economic and cultural life of the people of southeastern New Mexico.

## Graduate Outcomes

All students admitted to NMSU Carlsbad will be assessed for the abilities to demonstrate academic achievement and specific competencies and skills as they progress through their programs of study. Every course a student takes will provide instruction that teaches, emphasizes, or reinforces one or more of the graduate outcomes.

Upon graduation, students of NMSU Carlsbad will be able to satisfactorily demonstrate:

1. Effective communications skills in reading, writing, listening, and speaking;
2. Basic critical thinking skills;
3. The obligations of effective citizenship in a democratic society;
4. The fundamental concepts of mathematics and science;
5. Appropriate technological literacy and skills for personal and professional use;
6. The fundamental concepts for analyzing significant primary texts and/or works of art, including fine arts, literature, music, theater, and film.

## CAAP Test Requirement

To evaluate its graduate outcomes, NMSU Carlsbad has chosen the Collegiate Assessment of Academic Proficiency Exam (CAAP). This exam measures students' proficiencies in reading, writing, mathematics, science and critical thinking. **All students who are graduating with an associate's degree must take this exam in the last semester of their program.** Students will be given information about the exam site and date at the time that they apply for graduation.

## Accreditation

NMSU Carlsbad has been accredited fully by the North Central Association of Colleges and Secondary Schools as a degree-granting institution. The associate degree program in nursing offered by NMSU Carlsbad is accredited fully by the National League for Nursing Accrediting Commission. Both the certificate and associate degree programs in nursing are approved by the State of New Mexico Board of Nursing. All vocational programs offered by NMSU Carlsbad are reviewed and approved by the New Mexico State Department of Education's Division of Vocational, Technical and Adult Education.

## Professional Associations

The college holds membership in the New Mexico Community College Association, the American Association of Community Colleges, and the American Association of Higher Education. In addition, courses offered by NMSU Carlsbad have been approved



for enrollment by those veterans and dependents that qualify for higher education benefits under the various sections of the Veterans' Educational Assistance Act.

## Operating Agreement

The Board of Regents of New Mexico State University (hereafter called Regents) and the Board of Education of the Carlsbad Municipal Schools District have entered into the following agreement concerning the operation of NMSU Carlsbad.

The duties and responsibilities of the Board of Education in relation to NMSU Carlsbad are as follows:

1. Act in an advisory capacity to the Regents in all matters relating to the conduct of NMSU Carlsbad.
2. Approve an annual budget for NMSU Carlsbad for recommendation to the Regents.
3. Certify to the County commissioners the tax levy.
4. Conduct the election for tax levies for NMSU Carlsbad.

The regents, through appropriate representatives, shall have full authority in relation to all academic and administrative matters at NMSU Carlsbad, although the Board of Education will serve in an advisory capacity in such matters.

## Why Students Choose NMSU Carlsbad

Most students choose to attend NMSU Carlsbad because the campus is close to their homes. In contrast to attendance at larger institutions, students attending NMSU Carlsbad receive more individual attention from faculty and staff to encourage their academic success, and they can earn credit in lower-division courses--equivalent to those offered by NMSU Las Cruces--at a lower cost. Many students also have the opportunity to complete their high school instruction, and to complete their college education at an associate-level on the same campus. The college offers classes at times convenient to full-time as well as part-time students. Academic programs and related services are expanding regularly to meet the demands of the changing student body and local community. Students have access to a multitude of valuable services offered on-campus to meet their educational and career goals. Entertainment and cultural events are sponsored regularly. Students are equipped with the knowledge, competencies, and skills to enter the work force immediately, or to transfer to baccalaureate-granting institutions anywhere in the country.

## Become a Part of the University

NMSU Carlsbad is the principal public institution for associate-level study in Eddy County. Our foremost purpose is to

provide quality academic programs, facilities, and resources to accommodate the needs of our richly diverse student body. Here, students have the opportunity to learn from a dedicated and diverse group of faculty and college instructors who regard excellence in teaching as their principal goal. The campus' low student-to-faculty ratio encourages the individual attention and personalized instruction often unavailable at larger institutions. The low tuition associated with enrollment at NMSU Carlsbad, compared to costs to attend larger campuses, often permits students to economize the cost of higher education.

Students who need to complete their high-school equivalency requirements can attend special courses at NMSU Carlsbad through the Adult Basic Education (ABE) and General Educational Development (GED) preparation programs. Students who are still enrolled in high school can take college courses at NMSU Carlsbad through special articulation and advanced placement programs. Students who are working either full-time or part-time can still attend NMSU Carlsbad because classes are offered fourteen hours per day, Monday through Friday, and additional classes are offered on Saturdays as well as online. Students may also pursue their post-secondary education and job training through special courses contracted with industries and businesses in the region.

A variety of resources and services are made available to students who attend NMSU Carlsbad. These include the assessment of academic preparation for college-level instruction, placement in courses intended to address academic weaknesses, tutorial assistance, financial assistance, career guidance, and wellness programs.

Most academic credit courses offered at NMSU Carlsbad duplicate those offered at NMSU Las Cruces, and may be used for the total credit requirements for baccalaureate graduation.

Academic programs at NMSU Carlsbad are expanding continually in response to the needs of our students and in reflection of the changing world in which our graduates will live, work, and contribute to global welfare. The campus' excellent certificate and associate programs and faculty are supported by state-of-the-art technology, including computer-assisted instruction in specific liberal arts and vocational-technical courses, as well as access to Internet. Students benefit by gaining access to these technologies, as well as to the campus library, which serves as a hub to connect students to global and local resources in digital and print formats.

NMSU Carlsbad also provides excellent fine arts facilities for instruction and accommodates several entertainment and cultural events annually. Drama students enrolled at NMSU Carlsbad participate in Carlsbad's community theater. Students who have recently moved to the region will find numerous recreational activities and facilities associated with the Pecos River and park

system. In addition, Carlsbad hosts a number of art galleries, the Carlsbad Museum and Art Center, and the Living Desert Zoo and Gardens State Park. The city has a regional airport and is located ten miles from the entrance to the *world's eighth wonder*, Carlsbad Caverns. Residents are also within driving distance of a number of other national parks and sightseeing areas, which are accessible nearly all year due to the region's mild and pleasant winters and its warm and dry summers.

Placement of our graduates in meaningful careers is important to the economic stability of the region. Our Counseling and Student Development Center announces opportunities for students to engage in cooperative education and internship experiences; it also provides job information and related services to students who seek help defining and choosing their careers.

## Student Life and Government

Although NMSU Carlsbad does not maintain dormitories, the Student Services Office can be instrumental in helping students locate suitable housing.

Academic programs and student activities at NMSU Carlsbad are available to all students without regard to race, ethnic origin, creed, religion, gender, sexual orientation, disability, or national origin. Students who possess a disability that impacts a major life activity may request and receive academic accommodation assistance as appropriate.

To begin the process of securing academic accommodations, students must first self-identify with the Special Needs Services Office in the Counseling and Student Development Center in Room 107 or call 234-9321 to make an appointment.

- The provisions of this catalog are not regarded as a contract between the students and NMSU Carlsbad. The college reserves the right to alter, amend, or revoke any rule or regulation, and to otherwise change any provision or requirements when such action will serve the interests of the student or the college. Our policy is to give advance notice of such changes whenever feasible. Unless the change in a rule or regulation specifies otherwise, it shall become effective immediately. Without limiting the extent of its powers to alter, amend, or revoke rules and regulations associated with its delivery of instruction and academic support services, NMSU Carlsbad reserves the right to make changes in degree requirements, in agreement with NMSU-Las Cruces, by
  - **altering the number of credits and/or courses required in a specific certificate or associate degree program;**
  - **deleting courses;**

- **amending courses by increasing or decreasing the credits of specific courses, or varying the content of specific courses;**
- **offering substitute courses in the same or cognate fields; and/or,**
- **adding, altering, or deleting academic programs, related offerings, and support services.**

Whenever curricular changes alter an enrolled students' program and academic progress towards graduation, NMSU Carlsbad will make every reasonable effort to help that student complete his or her studies in a timely manner.

Faculty and academic advisors may assist any enrolled student in planning a program of study. The final responsibility for meeting the requirements for graduation, however, remains with the student.



# Admissions, Registration, Regulations, and Academic Requirements

## Admissions

A student may be accepted for undergraduate admission to NMSU Carlsbad as (1) a degree-seeking student or (2) a non-degree student under the policies and conditions as set forth in this section.

### Degree-Seeking Student

Qualifications for undergraduate admission to NMSU Carlsbad include the following:

- Graduation from any U.S. high school or academy that is accredited by a regional accrediting association or approved by a state department of education or state universities.
- Students who pass the GED test after January 1, 2002, need a score of 450 or higher. Students who passed the GED test between January 1, 1997 and January 1, 2002, need a score of 45 or higher. Students who passed the GED test prior to January 1, 1997, need a score of 40 or higher.

Students are required to submit applications for admission prior to registration. If transcripts are not received by the completion of registration, students must sign a “Non-Degree Conditional Agreement” to allow additional time for transcripts to be received. If transcripts are not received by the date set for conditional enrollment, the student will remain in non-degree status.

### Non-Degree Student

Non-degree admission is designed to meet the needs of part time students who do not wish to pursue a degree at this campus. Non-degree students are not eligible for benefits from any veterans’ or financial aid program.

Transcripts from previous institutions are not required, but a student must certify that he/she is either a high school graduate or has obtained a GED certificate and that he/she is eligible to return, in good academic standing, to any previously attended college or university by submitting copies of transcripts to the admissions office at NMSU Carlsbad. Non-degree students are subject to the same university regulations as regular students.

Non-degree admission requires a non-degree application at the time of the first registration.

### New and Transfer Students

In applying for admission to NMSU Carlsbad, new and transfer

students are advised to follow these procedures:

1. Apply for admission. Forms are available in the Student Services Office or online at <https://app.applyyourself.com/?id=nmsu-u>.
2. Request official transcripts of high school or GED and all previous college course work. All official transcripts should be mailed directly by the school or college registrar to NMSU Carlsbad, ATTN: Admissions Office, 1500 University Drive, Carlsbad, NM 88220.
3. Take placement tests in certain Math, English, and Reading. The test may be waived for students who have taken the ACT within the last year; are transferring in Math, Reading or English courses or pursuing certain vocational programs.
4. Meet with an advisor in the Counseling and Student Development Center before registering to receive assistance with choice of major, course information, degree plans, and proper course selection.
5. Enter registration information by web (<https://my.nmsu.edu>) and pay, or make arrangement to pay, applicable tuition and fees in the Business Office.

### Change of Admission Status

A non-degree student in good academic standing (cumulative GPA of 2.0 or above at NMSU Carlsbad) may apply for a change of status from non-degree to regular admission by completing a change-of-status application and by meeting the requirements for regular admissions. Non-degree students may not apply more than 30 credits earned under the non-degree status to any NMSU undergraduate degree program.

### Admission by GED

A student who is 16-years-of-age and has satisfactorily passed the GED is eligible for admission to NMSU Carlsbad. The student must provide an original transcript of the GED scores and go through the regular admissions process.

### Readmission

Former students of New Mexico State University who have been out of school for more than two consecutive terms are required to make formal application for readmission.

A student who has attended other institutions during an absence must have official transcripts forwarded directly to the Admissions Office by the registrar of each institution and must be eligible to return, in good academic standing, to the college or university last attended. Admission status at the time of

readmission will normally be determined by previous NMSU academic standing; however, academic performance at other institutions attended during the applicant's absence from NMSU may be taken into consideration in determining the student's academic admission status.

### **Transfer Admission**

Transfer students from other colleges or universities will be accepted for undergraduate studies if they have at least a C (2.0) cumulative grade average and are eligible to return to the college or university last attended. The transfer student must submit official transcripts or records of credit earned at each college or educational institution previously attended within the first two weeks. These transcripts must be sent directly to the NMSU Carlsbad Admissions Office by the registrar of each institution attended. A student who conceals the fact that he/she has attended another college or university and who does not submit a transcript for each institution, whether or not credit was earned, can be subject to immediate suspension. Transcripts are evaluated, allowable credits are determined, and class standing is assigned only after the formal application for admission is submitted. On the basis of the transcripts, credit may be granted for courses taken at other colleges or universities in which a grade of D (1.0) or higher was earned.

### **Transfer Credits**

On the basis of transcript evaluation, credit may be granted for courses taken at other colleges or universities in which a grade of D or higher is earned. Semester and cumulative grade-point averages are computed solely on courses taken at New Mexico State University; however, transfer credits that are accepted will apply toward the degree. Transcripts from other universities must be provided to NMSU Carlsbad as part of the admission process and are evaluated by the Registrar Office at the Las Cruces campus.

Transcripts will only be evaluated after the student is officially enrolled as a regular status student. The Vice President for Academic Affairs may evaluate credits from non-accredited institutions after the student has completed two semesters in full-time status with satisfactory grades and make recommendation to the Registrar Office for acceptance.

### **Special Admission to Nursing Programs**

Entrance and enrollments to the nursing programs are limited. Special applications are required and may be obtained from the offices of the Nursing Program. In addition to meeting regular undergraduate admissions requirements, students must be selected into these programs. Nursing students are also required to take the American College Test (ACT), and successfully complete a certified nursing assistant program to be eligible for entry into the program. Nursing majors must earn satisfactory grades and must make satisfactory progress in their theory

courses prior to advancing to and enrolling in nursing clinicals. Refer to page 50 for more information.

### **Advising**

Individual academic advising is available to all current and potential students. Advisors help individuals understand and utilize placement test results, set and reach academic goals, decide upon a major course of study, select appropriate courses, and facilitate successful transfer to four-year institutions. To make an appointment, call 234-9337 or visit the Counseling & Student Development Center in Room 107 of the main building.

### **Registration**

Ongoing Registration for Fall semester is scheduled April through August, prior to the first day of instruction, and registration for Spring semester is scheduled November through January, again prior to the first day of instruction.

### **Late Registration**

Late registration occurs after instruction has begun and carries cut-off dates and late fees. Admission to any course is subject to availability of class space and/or instructor approval.

### **Orientation**

Students will complete the enrollment process by learning about campus programs, services, and policies in addition to learning how to use Canvas, necessary for online, hybrid and most face-to-face classes.

### **Degree Audit**

Students have access to the Degree Audit System (STAR) available through their student online account at <https://my.nmsu.edu>. To self check progress toward a degree, students must select the college, the degree, and the year they meet the requirements. The reports are self explanatory. See an advisor for assistance, if necessary.

### **Demonstration of Academic Competencies upon Entrance to NMSU Carlsbad**

All entering students must complete required basic skills placement exams to determine their competency levels in math, English, and reading prior to receiving course advisement or registering for classes. Based upon these scores, and other relevant information (i.e. recent ACT scores, H.S. record), students are advised into the appropriate courses needed or required to address any academic skill weaknesses directly and as soon as possible after a student is admitted. All degree or certificate-seeking students are required to prove or establish basic skills competency before any official program degree or certificate may be awarded. Therefore, students who place into any developmental course upon completion of entry testing are encouraged to take and complete any required basic skills courses during their first year of enrollment at

NMSU Carlsbad. Note that developmental education courses are designated with the letter N and are calculated as part of a student's academic grade-point average, but though required, developmental courses may not be counted for credit toward an official degree or certificate plan.

### **Non-degree Special Admission Programs for High School Students Dual Credit for High School Students**

With the passage of State Law SB943 (Laws 2007, Chapter 227) students attending a New Mexico public high school, charter school, or state-supported school and who entered that school in the 2009-2010 school year or later are required to participate in a college experience prior to graduation. They may complete the requirement by taking one of the following: 1) an articulated course, which is not available through NMSU Carlsbad; 2) an advanced placement (AP) course in high school; 3) an online college course; and/or 4) an in-person (face-to-face) college course. This program is designed to enhance and supplement the high school curriculum, not duplicate or replace it; therefore, there may be limitations on class choice.

High school students who wish to take academic college courses at NMSU Carlsbad must meet the following requirements: sophomores must have a 3.75 or better high school grade point average (GPA), juniors a 3.50 high school GPA, and seniors a 3.00 high school GPA. In addition, they must achieve acceptable scores on the COMPASS or ACT placement tests. Students who are at or below freshman standing in high school may not take academic courses at NMSU Carlsbad.

Freshmen, sophomores, juniors, and seniors who wish to take career/technical courses must have a 2.00 high school GPA. Students who are below freshman standing in high school may not take career/technical courses at NMSU Carlsbad. Students enrolling in career courses at NMSU Carlsbad must begin the Key Trains sequence upon admission and complete the Work Keys assessment prior to graduating from a certificate program. What course a student is allowed to take is based on his or her GPA, placement assessment results, and the courses authorized by his or her high school.

NMSU Carlsbad waives tuition and general fees for students participating in this program. Students will be responsible for lab fees or other course-specific fees for their courses. For approved courses, students may contact their high school counselors or NMSU Carlsbad's dual credit coordinator. Developmental (remedial) and physical education courses are not eligible for dual credit. Grades for courses taken at the college will be sent to the appropriate high school and are required to be transcribed on the high school transcript.

### **Early Admit**

High school students who wish to take college courses but do

not want their grade on the high school transcript must meet the same eligibility requirements as dual credit students (see above). However, these students will be required to pay course specific fees and purchase the book for the class. Students who are at or below freshman standing in high school may not take academic courses at NMSU Carlsbad. Students who are below freshman standing in high school may not take career/technical courses at NMSU Carlsbad.

### **Home-School Students**

Home-school students who choose to participate in college courses must meet the same requirements described above and will be required to pay their tuition and fees and to purchase their books. These students will be required to provide the college with a graded transcript. Home-school students must provide documentation that they are registered as home-schooled students with the local school district or with the NM Public Education Department (PED). They must also provide documentation, if applicable, of registration with a home-schooled program. Students must be concurrently enrolled in their high school curriculum as reflected on their transcript. This transcript must provide course grades (A-F), courses, course levels, grade level, and grades signed by the home-schooled program evaluator. Students must also meet the GPA requirements for each grade level.

## **Regulations**

The following regulations apply to all campuses of NMSU and are effective with the publication of this catalog. Tuition amounts, fees, and similar items are subject to annual review and changes are effective with the current catalog or published in the current class schedule.

### **University Credits**

The unit of university credits is the semester hour, which is the equivalent of one hour's recitation or a minimum of two hours of practice per week for one semester.

### **Class Rank (Classification)**

A student's classification depends upon the number of credits completed toward graduation. Sophomore rank is achieved with successful completion of 28 credits; junior rank, 62 credits; senior rank, 94 credits.

### **Class Load**

The normal load in a regular semester is 16-18 credits in all colleges of the university. An overload is more than 18 credits. A normal load in summer school is the same number of credits as there are weeks in the session. Written permission for the student to register for an overload must be obtained from the Vice

President for Student Services at NMSU Carlsbad or the dean of the student's college at NMSU Las Cruces. To be eligible to take an overload, the student must have a cumulative grade-point average for the two preceding semesters of 2.5, with no grade less than C. A one-credit course in physical activity may be taken without being included in the calculation for determining an overload. No freshmen will be permitted to assume an overload.

### Basic Academic Skills

NMSU requires all students to demonstrate basic academic skills in both English and mathematics to ensure that they have the abilities to succeed in upper-division courses numbered 300 or higher. First-time students must meet both of these requirements before enrolling in any upper-division courses. Transfer students with 45 or more credits will be allowed to enroll in upper-division courses for one semester. After that point, they must meet both of these requirements before enrolling in upper-division courses. The options for satisfying basic skills in English and mathematics are listed below. Completion of basic skills requirements will not necessarily satisfy university general education requirements in English and mathematics.

### English Basic Skill Requirement Options

- 30 ACT English Score. Students may satisfy basic skills requirements in English by scoring 30 or higher on ACT English exams. However, students must still earn credit for ENGL 111G by one of these options:
- ENGL 111G or ENGL 111H. Students may satisfy English basic skills by passing ENGL 111G or ENGL 111H with a grade of C or higher.
- CLEP Credit. Students may earn credit for ENGL 111G or ENGL 111H by taking the College Level Examination Program subject exam in freshman college composition with a score of 57 (top quartile) or higher. See "Credit by College Level Placement Examination" later in this chapter for details.
- Advanced Placement Credit. Students may receive advanced placement credit for ENGL 111G or ENGL 111H by scoring 3, 4, or 5 on the English Advanced Placement Exam. See "Advanced Placement" later in this chapter for details.
- Transfer Credits. Students may receive credit for ENGL 111G by transferring 3 or more credits of college-level English composition, with a grade of C or above from another accredited institution. International students may be required to satisfy the requirements under "SPCD 111G" below.
- Transfer Credits. Nonaccredited Institutions. Students may receive credit for ENGL 111G by transferring 3 or more credits of college-level English composition with a grade of C or higher from a nonaccredited institution, and by writing a theme which is judged adequate by the Department of English.

- SPCD 111G. International students who took the TOEFL examination must complete SPCD 111G with a satisfactory grade.
- Developmental Courses. Students who score below 12 on the ACT English exam must pass two developmental English courses (CCDE 105N, CCDE 110N) before enrolling in ENGL 111G. Students who score 13 to 15 on the ACT English exam must pass one developmental English course (CCDE 110N) before enrolling in ENGL 111G. Developmental courses are included on the transcript and will be included in the calculation of the GPA; however, credits in developmental courses will not count toward a degree.

### Mathematics Basic Skills Requirement Options

- 23 ACT Mathematics Score. Students may satisfy basic skills requirements in mathematics by scoring 23 or higher on ACT mathematics exams. However, students must still fulfill the general education math requirement.
- Coursework. Students scoring below 23 on ACT mathematics exams may satisfy basic skills in mathematics by earning a grade of C or higher in one of the following courses or course combinations: (a) CCDM 112N and CCDM 113N; (b) CCDM 114N; (c) MATH 111 and MATH 112G; (d) any mathematics course numbered 120 or above. New students are placed in these courses according to their high school GPAs and their ACT scores in mathematics. However, new engineering students must take the mathematics placement exam (MPE), and any new student may choose to take the MPE to test towards a higher placement. Placement does not earn academic credit, and placement in a mathematics course numbered 120 or higher does not satisfy the basic skills requirement.
- Basic Skills Exam. Students may take the Basic Skills Exam, which is offered twice a semester by the Department of Mathematical Sciences. A passing score will meet the basic skills requirement, although it will not appear as credit on the student's transcript.
- Advanced Placement Credit. Students may receive credit for courses which may satisfy basic skills in mathematics by taking the math Advanced Placement Exam. See "Advanced Placement" later in this chapter for details.
- Developmental Courses. Students who score 15 or below on the ACT mathematics exam must pass two developmental mathematics courses, CCDM 103N and CCDM 114N, to qualify to enter university-level mathematics courses. Students who score 16 on the ACT mathematics exam must pass CCDM 114N to qualify to enter university-level mathematics courses. Students who score 17 or higher on the ACT mathematics exam, but whose mathematics placement exam scores do not qualify them to enter university-level mathematics courses, will be placed in the

appropriated CCDM course, and must pass the CCDM course or courses before enrolling in university-level mathematics courses. Developmental courses are included on the transcript and will be included in the calculation of the GPA; however, credits in developmental courses will not count toward a degree.

**Satisfactory Academic Progress**

A full-time student is making satisfactory progress when the cumulative number of credits earned at NMSU, divided by the number of semesters attended at NMSU, equals at least 12. Part-time students must earn a proportional number of credits in the same time period for purposes of financial aid. In the case of new freshmen, this definition will not be applied until the beginning of the third semester of enrollment; however, for all other students, it will apply after one semester of enrollment. All students at the end of their second academic year must have a cumulative 2.0 GPA.

**University Grading System**

Grade reports are not automatically mailed to students. Students can access grades and credits by the web using my.nmsu.edu. It is the responsibility of the student to provide updated grade addresses to the Office of the Registrar. At the request of the student, the instructor will provide information on progress in the course prior to the last day to drop a course. The NMSU system of grading is expressed in letters, which carry grade points used in calculating the cumulative grade-point average:

Letter Grade	Grade-points Per Unit of Credit
A+ .....	4.0
A .....	4.0
A- .....	3.7
B+ .....	3.3
B .....	3.0
B- .....	2.7
C+ .....	2.3
C .....	2.0
C- .....	2.0
D+, D, D- .....	1.0
F .....	0
W-Withdrawal .....	0
N-Grade not submitted .....	0
CR-Credit authorized, but not letter grade .....	0
IP-In progress .....	0
RR-Progress in undergraduate course .....	0
S*-Satisfactory work .....	0

\*An S grade is a grade satisfactory to the professor and is normally equivalent to the letter grade of C or higher.

In computing the overall grade-point average, the total credits in which grades of A, B, C, D, or F have been assigned is divided into the total number of grade-points earned.

A course for which only CR, but no letter grade, is given and a course in which an S or PR grade is earned may be counted toward graduation but is not computed in the grade-point average.

**Prerequisite**

A prerequisite is an enforceable entry requirement for a particular course.

**Repeating Courses**

A student may repeat a course in which a D or F grade has been earned at this university. A computable grade (excluding I, W, RR, AU, CR, S, or U) in a repeated course may be substituted in the calculation of the grade-point average, though the original grade also remains on the transcript. All grades in repeated courses, except the first grade earned, are counted in the grade-point average. If a student repeats a course eligible for grade substitution in which he has earned a D and fails the course, the second grade of F may be substituted for the original grade. If this is done, the student loses both credit and grade-points earned by the original D.

Neither credits nor grade-points may be earned by repeating a course for which a grade of C or higher has already been received. Students may repeat courses, as prescribed, for a maximum of 30 semester credits.

*Note: Certain forms of financial aid and Veterans' benefits will not provide assistance to students who repeat courses previously completed successfully. Compliance with such regulations is the student's responsibility.*

**Incomplete Grade**

The grade of I (incomplete) is given for passable work that could not be completed due to circumstances beyond the student's control. The following regulations apply to removing or changing an I grade:

1. Instructors may assign I grades only if the student is unable to complete the course due to circumstances beyond the student's control that develop after the last day to withdraw from the course. Examples of appropriate circumstances include documented illness, documented death or crisis in the student's immediate family, and similar circumstances. Job related circumstances are generally not appropriate grounds for assigning an I grade. In no case is an I grade to be used to avoid the assigning of D, F, U, or RR grades for marginal or failing work.
2. To assign an I grade, the instructor must complete the I



Grade Information Form and have the form delivered to the course dean, together with the instructor's grade sheets for the semester. The instructor will state in writing on the I Grade Information Form the steps necessary to complete the remaining coursework or the instructor may indicate that the student will be required to re-enroll in the course to receive credit (in which case the I grade will not be removed). The student will sign this document or the course dean will send a copy of the document to the student's official permanent address as recorded in the Registrar's Office.

3. The student is entitled to have the I grade removed from their transcript only if they complete the remaining coursework as specified on the I Grade Information Form, in a manner satisfactory to the instructor. The work must be completed within 12 months after the I grade assigned and prior to the student's graduation, or within a shorter period of time if specified by the instructor on the I Grade Information Form. If the student fails to complete the coursework, the instructor may change the I grade to any appropriate grade (including D, F, or U) provided that the instructor stated that this would occur on the I Grade Information Form.
4. I grades can be removed from the student's transcript by the instructor only during the 12-month period following assignment of the I grade or prior to the student's graduation, whichever comes first. To remove an I grade, the instructor must complete a Change of Grade Form and file the form with the Registrar. The instructor may assign whatever grade is appropriate for the entire course. This may include grades of D, F, or U. An I grade not changed by the assigning instructor within 12 months and prior to graduation shall remain an I grade thereafter.
5. A student may re-enroll and receive credit for any course for which an I grade was previously received, but retaking the course will not result in a removal of the I grade from the student's transcript.

The effect of removing an I grade on a student's academic standing (scholastic warning, probation, or suspension) depends on the date the transaction is officially recorded on the student's academic record. If the transaction is recorded before the student begins another semester, the grade replacing the I is included in the grade-point average calculation that establishes the student's academic standing. If the transaction is recorded after the student begins another semester, the new grade's effect on academic standing is based upon its inclusion with grades for the semester in which the student is enrolled.

### **RR Grade (Required Repeat)**

The RR grade applies only to designated skill development undergraduate courses approved by the University Curriculum

Committee and indicates the student has made substantial progress towards completing the requirements of the course. It carries neither penalty nor credit. The student must reregister and successfully complete the course in order to earn credit. The grade of RR may be received only once in any given course, and it remains on the student's transcript.

### **S/U Option**

Students who have earned a minimum of 28 semester credits at NMSU under traditional grading, and with an overall average of 2.5 or better may exercise the S/U option. The following limitations apply:

1. No more than 7 credits per semester or 4 credits per summer session.
2. Not to exceed a total of 21 semester credits.

These limitations do not apply to honors, and courses officially designated S/U.

Each course under this option must be requested during registration. Eligibility must be determined by the Vice President for Student Services and certified by the student. The course must be taken outside the major. If the student changes majors, the new major department may require a traditional grade for a course previously passed with an S grade. Eligibility for S/U grading must be reestablished after adjusted credit has been approved.

Non-degree students who do not meet the above requirements may take courses under the S/U option; however, these courses may not be applied toward an undergraduate degree at New Mexico State University.

Each academic college of the university may designate courses in which the grading will be on a basis of S or U for all students enrolled in the courses. Credits in such courses are not included in the 21-credit limitation or the 7-credit-per-semester limit.

### **Grade Point Average**

A student's NMSU semester and cumulative GPAs will be based solely on courses taken at NMSU or under an approved National Student Exchange.

### **Independent Studies**

Independent study courses (including directed reading and special topics courses which do not carry a subtitle) are for students capable of self-direction who meet the requirements for the S/U option, i.e., if the students are not eligible for the S/U option, they are not eligible for independent study. Each college determines the maximum number of credits that may be earned in independent study courses.

### **Adjusted Credit Option**

The adjusted credit option allows students who obtain a low grade-point average (less than 2.0 cumulative) during their first few semesters to get a fresh start. This option may be used only once and is not reversible. All courses carrying a grade of S, CR, C, or better earned prior to the grading period in which the student requests the adjusted credit option (including transfer courses) are included as adjusted credit. All allowable credits are designated on the permanent academic record as “adjusted credit” and are omitted from the calculations of the cumulative grade-point average.

A fee of \$10 is required for the submission of an adjusted credit option application. Application forms are available in the Student Services Office. Students applying for this option must

1. not hold a baccalaureate degree;
2. be currently enrolled as a regular/nondegree undergraduate student;
3. have a cumulative grade-point average of less than 2.0 at NMSU;
4. have successfully accumulated fewer than 60 transfer plus NMSU credits;
5. exercise the option only during the fall or spring semester before the last day to withdraw from the university; and
6. pass an additional 30 graded credits before they may be awarded an associate’s degree.

Other courses taken during the period of credit adjustment are not calculated in the cumulative grade-point average. The repeat rule for courses starts anew for students who have taken the adjusted credit option.

Credits covered by this option are shown on the transcript with an appropriate notation, and all course work attempted is shown. In no circumstances will a transcript of this record be issued that does not include all courses attempted at this university.

Probationary status and eligibility for on-campus employment is not affected by the exercise of the adjusted credit option.

Students are eligible for university honors if the criteria for university honors are met for all courses taken at NMSU after the period of adjusted credit.

NOTE: Certain forms of financial aid will not provide assistance to students who repeat courses they previously completed successfully. Compliance with such regulations is the student’s responsibility.

### **Advanced Placement**

Students who have completed college-level courses in secondary schools and have taken the Advanced Placement Examinations

of the College Examination Board with resulting composite scores of 3, 4, or 5, may petition the Vice President for Academic Affairs at NMSU Carlsbad, or the appropriate academic dean at NMSU-Las Cruces, for college credit and advanced placement. The amount of credit and the equivalent university courses for which credit will be granted will be determined by the faculty at NMSU Carlsbad or the appropriate head of the NMSU Las Cruces department in which the course is offered. Such credit will be treated as transfer credit without a grade, will count toward graduation, and may be used in fulfilling specific curriculum requirements.

### **Credit By Examination**

Any enrolled student with a cumulative GPA of at least 2.0 currently attending classes may, with permission of the appropriate department, challenge by examination any undergraduate course in which credit has not been previously earned except an independent study, research or reading course, or any foreign language course that precedes the final course in the lower-division sequence. The manner of administering the examination and granting permission shall be determined by the department in which the course is being challenged. Students may not enroll in a single course, challenge it by examination, and drop it during the drop/add period, unless they enroll in an additional course.

In exceptional cases in which a student demonstrates outstanding ability in a course in which he is already registered, he may be permitted to challenge the course.

A student desiring to apply for special examination may obtain the necessary forms from the Student Services Office. The fee for challenging a course is the same as the approved tuition rate.

A grade of C or better is required for credit and will be recorded on the student record as CR. Courses may not be challenged under the S/U option.

The special examination privilege is based on the principle that the student, exclusively, has the responsibility for preparing for a special examination.

### **Credit By College Level Examination Program (CLEP)**

Prior to or during a student’s enrollment at NMSU, credits may be earned through the College Level Examination Program (CLEP) of the College Entrance Examination Board. CLEP is a national program of credit by examination that offers the opportunity to earn credits for college level achievement wherever or however the student learned.

Earned CLEP credit will be treated as transfer credit without a grade, will count toward graduation, and may be used in fulfilling specific curriculum requirements.

A total of 30 credits may be obtained through the five examination areas (English composition, humanities, mathematics, natural sciences, and social sciences - history). Credit may also be obtained for courses in subject matter areas by successful completion of the Subject Examinations of CLEP. The appropriate NMSU dean or department should be consulted for exam scores required to allow credit.

The examinations should be taken at the beginning of the first semester, as some CLEP credit is awarded only for introductory courses. Any student enrolled at NMSU Carlsbad may obtain the necessary forms from the Testing Services Office at the East Mesa Campus at NMSU Las Cruces or call 575-528-7294 for more information. For local information call Joe Olivares at 575-234-9322.

### **Credit for Military Service**

NMSU will award academic credit to United States military personnel for courses and military occupational specialties (MOS), based on the American Council of Education Guide (ACE) as well as through national standardized tests, such as CLEP, AP, PEP, and DANTES. Credit for military-training is in accordance with NMSU Faculty Senate Legislation Proposition 24-07/08, which was passed in May 2008. Military Training and Military Occupational Specialties (MOS) must have a recommendation evaluation by ACE (in the ACE Guide) for credit to be awarded. Courses accepted for transfer credit are given an NMSU equivalent and become part of the student's official NMSU transcript and academic record. If a student wishes to appeal a decision regarding the acceptance of military training/education and/or MOS for academic credit, the student must submit a written statement of appeal to the Dean of the College to which the student has applied. The Dean will review the merits of the appeal and render a decision. The decision of the Dean is final.

Only Primary MOS(s) are eligible for academic credit in the initial review and evaluation. Credit for Duty and/or Secondary MOS may be eligible for academic credit if the student petitions the college's Associate Dean. Primary MOS is the primary specialty of a soldier and reflects the broadest and most in-depth scope of military experience. Veterans, active-duty personnel, Guard and Reservists who are a current student or a student applying for admission to NMSU may be granted academic credit on a case-by-case basis upon evaluation of military transcripts – Sailor/Marine ACE Registry Transcript System (SMARTS), Army/ACE Registry Transcript System (AARTS), Community College of the Air Force (CCAF) and United States Coast Guard transcripts. Course equivalencies and credit hours awarded for a particular NMSU degree are determined by colleges and/or academic departments. Credit hours may be awarded for specific courses toward degree requirement, or as elective credit. The number

of credit hours awarded will be determined by the college and/or academic department. The amount of credit will not exceed 30 semester hours for undergraduate and six semester hours for graduate-level students. Official documentation for military service, education and training must be submitted to the NMSU Office of the Registrar.

### **Audits**

A regularly enrolled student may register for any course prior to the last day of registration as an auditor without credit with the consent of instructor, provided the facilities are not required for regular students. The fee is the same as for credit courses. Audit courses are not considered in determining the maximum load except for students on probation and graduate students. A student may not change from credit to audit after the last day to register but may withdraw and continue to attend with the permission of the instructor. Audited courses are not suitable for persons receiving benefits from any veterans' or financial aid program.

### **Changes in Registration**

Changes in registration may be processed only in accordance with the university's regulations and with appropriate signatures. It is the responsibility of the student to initiate official withdrawal from a course and to obtain all necessary signatures on the drop/add form.

When a student officially drops a course, the W grade is assigned as follows:

1. No grade is assigned during the registration period.
2. A W grade is assigned to any student who officially drops a course during the first half of its duration. A student may not officially withdraw from a course after this time. All drop forms must be signed and dated by the instructor of the course, the advisor, and the department head.
3. A W is assigned in all courses to any student officially withdrawing from the university prior to the last three weeks of classes.

A student found insufficiently prepared to carry a regular course may be transferred to a more elementary course in the same field any day before the last day to officially withdraw from an individual course.

Any person attending under Veterans' Educational Assistance should notify the VA representative in the Student Services Office if dropping or adding courses, as this changes enrollment status for benefits. Additionally, persons receiving federal/state financial aid and or scholarships should discuss changes prior to finalizing them with the financial aid officer.

### **Withdrawal**

Withdrawal from any NMSU campus is an official procedure that must be approved as indicated on the withdrawal form. It is the student's responsibility to initiate withdrawal from the university and to obtain necessary signatures. Students who leave without following the official procedures are graded appropriately by the instructor. Withdrawal forms may be obtained in the Student Services Office. Deadlines for official withdrawal are published in the Schedule of Classes each semester.

Students who are receiving financial aid, scholarships and/or student loans, should consult with the Financial Aid Office prior to dropping one or more classes or totally withdrawing from the university.

### **Attendance and Student Performance:**

Students are expected to regularly attend all classes for which they are registered. Students making satisfactory progress in their classes will be excused from classes when they are representing NMSU on a university sponsored event. Authorized absences do not relieve the student of their class responsibilities. Prior written notice of the authorized absence will be provided to the instructor by the sponsoring department. Specific class attendance requirements are determined by the instructor of the course.

When the number of absences hinders a student's progress in a course, the instructor may initiate a statement of the student's excessive absences including a recommendation of retention or expulsion from the class. Based on the recommendation of the instructor and with the concurrence of the course department head and the Vice President for Academic Affairs at NMSU Carlsbad, or the appropriate academic dean at NMSU-Las Cruces, a student will be dropped for persistent absences or for persistent failure to complete assignments. Similarly, a student may also be dropped from a class for engaging in behavior that interferes with the educational environment of the class. Any student who has been dropped from a class shall have the right to appeal that decision through the Student Academic Grievance Policy.

Only enrolled students, for credit or audit, are permitted to attend classes. A student who has officially withdrawn from a course may continue to attend the course with the permission of the instructor for the remainder of the semester.

Students not enrolled may visit classes only with the permission of the instructor.

### **Veterans' Attendance and Satisfactory Progress**

The Veterans' Administration requires all veterans attending under the Veterans Educational Assistance Benefits to make satisfactory progress and systematic advancement toward an educational objective or be liable for over payments from the

Veterans' Administration. Satisfactory progress and regular class attendance are expected of such students.

If a veteran receiving benefits is suspended for academic reasons, benefits are terminated and will be restored only after readmission to NMSU.

If the university has liability claims filed against it as a result of a veteran failing to meet compliance requirements of the Veterans' Administration, the university will not release any academic records on the veteran until such time as the veteran has reimbursed the federal government for funds drawn in violation of those requirements.

## **International Students**

The general policies of the university as outlined in this catalog apply to international as well as domestic students. However, some special policies are necessitated by federal laws applicable only to international students.

An international student is any individual attending NMSU while present in the United States on a non-immigrant student visa. Legal immigrants or refugees must present documentation of their status either to Admissions or to the International Programs (IP) Office.

### **U.S. Citizenship and Immigration Services (USCIS)**

Some of the more important rules as established by the United States Department of Homeland Security are:

1. Each student must maintain full-time student status for both the fall and spring semesters.
2. Foreign students may not work off campus without authorization. On-campus employment may be authorized under certain conditions.
3. All foreign students must maintain an up-to-date record in the IP Office. This record must indicate the student's current living address and local phone number.
4. Prior to admission, a prospective foreign student must demonstrate the following:
  - academic ability to succeed in the chosen course of study;
  - adequate financial support to complete the chosen course of study; and
  - adequate command of the English language to maintain legal status as a full-time student for the fall and spring semesters.

### **Scholastic Ability**

1. Prospective undergraduates must have completed a minimum of 12 years' schooling and/or submit official diploma or completion certificate.

2. Official transcripts showing the classes taken and grades earned for the school years 10, 11, and 12 must be submitted. No hand-carried documents will be accepted unless received in a sealed envelope.
3. The scholastic average for the last three years of high school must be equivalent to 2.5. Foreign students are not admitted on a provisional or probationary basis. Graduation from a high school in the United States does not automatically qualify a foreign student for admission to NMSU. The student must also submit official transcripts from his or her foreign secondary school.

### Financial Support

1. Each prospective foreign student must submit a current financial support document with his or her application.
2. This document must show that (a) the person providing the financial support has the necessary funds, and (b) the funds can be transferred from the student's home country to the United States.

No financial aid is available from NMSU. The university reserves the right to demand advance deposit of funds for any period deemed reasonable prior to granting admission. A foreign national can never qualify for residency and must pay nonresident fees.

### English Language Proficiency

NMSU requires a score of 500 (paper-based)/173 (computer-based)/ 61 (internet-based) or better on the Test of English as a Foreign Language (TOEFL) for all foreign students, both nondegree and degree seeking. Foreign students may also demonstrate English proficiency by satisfactorily completing NMSU's Intensive English as Second Language programs. A waiver of the TOEFL requirement may be considered for

1. Students who are native speakers of English.
2. Students completing high school in the United States who (a) have attended the high school for at least two full semesters and (b) have scored in at least the 75th percentile in English on the ACT.
3. Students transferring from a junior college, or university in the United States who have earned a minimum of 30 acceptable semester credits (45 acceptable quarter credits) with a GPA of 2.5 or better. "Acceptable credit" means classes that require a high proficiency in both written and oral English.
4. Students demonstrating English-language proficiency by methods accepted by International Programs.
5. Students enrolling in certain programs where English language proficiency is not required.

The university reserves the right to require any prospective foreign student to meet the TOEFL requirement. For complete

information concerning the TOEFL examination, applicants should review the following web site: [www.toefl.org](http://www.toefl.org)

NMSU conducts an Intensive English Language Program for undergraduates and graduate students pursuing degree programs at NMSU. Foreign students are not admitted to the university for the sole purpose of studying English.

Prior to enrollment, each foreign student is administered an English screening examination. Based on the results, the student is either assigned to one of the special English classes for foreign students or is excused from special English instruction. Foreign students excused from SPCD 111G will be required to take ENGL 111G, including students whose native language is English. The student may then be required to complete one or more regular English classes as required for a particular degree. Completion of basic English courses at other U.S. institutions does not automatically satisfy this requirement.

### Admission Restrictions

Although NMSU does not set a quota for the total number of foreign students, there may be several factors that would prohibit admission even though the student meets all general requirements.

1. The dean of a chosen college and the department head of a chosen major or the provost/campus director of a branch campus may refuse to grant admission.
2. There may be a disproportionate number of foreign students or a disproportionate number of a particular nationality in one department or college.
3. Academic advisers, especially in the Graduate School, may not be available.
4. Foreign nationals may be nondegree if admitted as exchange students, or as part of a special program, or as holders of visas that allow incidental studies related to their current non-immigrant status.
5. Non native speakers of English normally are not admitted for summer sessions. There are some exceptions such as students admitted to NMSU's Intensive English Programs.
6. University branch campuses reserve the right to refuse admission to foreign students if the appropriate immigration and English-language support services are not available.
7. Preference for admission to the branch campuses is shown to students who graduate from high school in the United States.
8. University branch campuses reserve the right to set limits on the number of international students admitted to their respective campuses based on the percentage of international students within an academic program.

All application material, including the application for admission, letters of recommendation, transcripts or national examination

scores and/or transcripts from colleges or universities (with an English translation), test scores including the TOEFL, and proof of adequate financial support should be on file in the International Programs Office by the following suggested dates:

March 1\* for Fall semester

October 1\* for Spring semester

\*Contact the academic department for specific deadlines.

### Miscellaneous Regulations

1. All foreign students are required to have coverage at the Student Health Center except when the main campus Student Health Center is not available to them.
2. All foreign students must have health insurance. Students who do not purchase insurance from NMSU must present evidence of similar coverage to the IP Office. Students without insurance will not be allowed to register.
3. Upon arrival on campus new foreign students are not permitted to register until all IP requirements are met, including attending orientation and taking the English screening examination. All foreign students, therefore, are required to report to the appropriate office on their campus.
4. Carlsbad Branch: Office of Student Services,
5. 1500 University Drive, Room 111
6. Undergraduate students are required to carry at least 12 credits per semester.

## Recognition of Academic Achievement

### Dean's Honor List

Following the close of the semester, each college dean at NMSU Las Cruces publishes a list of students who have achieved honor standing in grades for the previous semester. Students who so qualify, in attendance at NMSU Carlsbad, will be listed on an NMSU Carlsbad Dean's Honor list. To be eligible, a student must have been enrolled in 12 or more semester credits with a computable grade in each. The top 15 percent of eligible students by college for that semester will be named to the Dean's Honor list.

### Crimson Scholars Programs

The Crimson Scholars Program at NMSU is a recognition and enrichment program for students of exceptional academic achievement. Designation as a Crimson Scholar places you among NMSU's top students and entitles you to a number of valuable privileges.

You do not need to apply to be a Crimson Scholar. At the beginning of each semester that you qualify as a Crimson Scholar, you will receive an email message confirming your status.

Privileges - You become automatically eligible for all Honors

classes; Early Registration allows you to have the first choice of classes; Library Privileges include being able to check books out for an extended period; You may have the opportunity for independent study, research projects and other meaningful work, guided by NMSU faculty; Eligible Crimson Scholars receive a lapel pin (Crimson Scholar status for 24 credits), recognition on the commencement program (Crimson Scholar status for 75 credits), and notation on their transcript as a Crimson Scholar Graduate (Crimson Scholar status for 90 credits).

Qualifications - **Degree-seeking undergraduates**, enrolled for three or more credits per semester at NMSU (main campus or one of the branch campuses); **New Freshman** (27 credits or less) with an ACT composite score of 26 or better (or an equivalent SAT score), or an ACT score of 24-25 (or an equivalent SAT score) and a 3.75 or higher High School GPA are eligible. These students must maintain a 3.5 minimum cumulative GPA to continue in the program; **Transfer Students** must have a 3.5 minimum cumulative GPA at their previous institution(s) to be eligible, and must maintain a 3.5 cumulative GPA to continue in the program; **Sophomores, Juniors, and Seniors** must have a 3.5 minimum cumulative GPA to continue in the program; **Currently enrolled** Crimson Scholars whose cumulative GPA drops below the required 3.5 will be dropped from the program. If the student's cumulative GPA again meets minimum requirements the following semester, the student will automatically be reinstated.

## Transcripts and Privacy Rights

The Office of Student Services assists current and prospective students in completing the admissions process, maintaining current student files and monitoring academic standing. Additionally, student enrollment status is continually updated and unofficial transcripts and academic records are maintained for all past or present students.

### Transcript of Credits

Official NMSU transcripts can be ordered online at <http://nmsu.edu/~registra/transcripts> or by mail (see Student Services). An electronic transcript is \$10.00 and a paper transcript is \$12.25. For questions, contact the NMSU Las Cruces Registrar's office at 575-646-4990. Official name changes on transcripts will be processed only if a student is currently enrolled and a written request is submitted.

### Social Security Numbers in Student Records

As required by law, social security numbers are collected from prospective and current students who 1) plan to seek employment on campus or 2) wish to receive financial aid. In addition, the university is mandated by federal tax regulations to provide tuition

and fee payment information to the student and the Internal Revenue Service, so that applicable educational tax credits may be computed. The social security number will be necessary to submit this tax reporting. The social security number is a confidential record and is maintained as such by the university in accordance with the Family Educational Rights and Privacy Act.

### **Privacy Rights**

The following information has been designated as directory information and is subject to release to the public under the Buckley Amendment (PL98-380), "The Family Educational Rights and Privacy Act of 1974": Student's name, address, email address, telephone listing, date and place of birth, major field of study, classification, participation in officially recognized activities and sports, weight and height of members of athletic teams, dates of attendance, degrees and awards received, and the most recent, previous educational agency or institution attended by the student.

Other information regarding disclosure of student data is posted at the Office of the Registrar in compliance with the ACT.

Requests for withholding directory information must be filed in writing with the Office of the Registrar.

## **Graduation Requirements**

### **To Graduate with a Certificate**

Graduates in certificate programs must demonstrate proficiency in reading, math, and English as evidenced by sufficient scores on the Workkeys® assessment. Additional remediation may be required.

### **To Graduate with an Associate Degree**

For each of the two-year associate degrees offered at NMSU Carlsbad, the student must complete a minimum of 66 credits, complete English 111G with a grade of C or better, complete a basic skills course in mathematics and reading (if needed) with a grade of C or better, and have an average of two grade-points per credit in all courses taken at NMSU. In addition, the last 15 credits of the degree must be completed at an NMSU campus and all degree requirements must be met.

### **Graduation with Honors**

The requirements for designation as a Crimson Scholar Graduate are listed in the sections on these programs.

The designation Meritorious Graduate is awarded to the top 15 percent of the students receiving associate degrees within each college in any one academic year, provided 45 or more credits have been completed at NMSU or NMSU Carlsbad.

### **Applying for One-Year Certificate or Two-Year Associate Degree**

Eligible students are required to submit an application for a certificate or associate degree by the deadline and pay applicable fees as published in the Schedule of Classes for the semester. The certificate application forms are available in the Student Services Office and information regarding the online degree application process is available at <http://nmsu.edu/~registra/degree-app/index.html>. It is recommended that students print a certificate or degree audit through their my.NMSU account and have it reviewed by an academic advisor in Counseling and Student Development Center at least one semester prior to registration for their last semester and also give a copy of the audit to Student Services Office staff for the student file. If certificate or degree requirements are not completed during the semester for which the student applied, the student must reapply and pay applicable fees.

**The earliest catalog you may select is the catalog in effect the first semester you attended college, or any subsequent catalog, provided it is not more than six years old when requirements are met.**

### **Attendance at Commencement**

The Vice President for Student Services certifies eligibility to participate in commencement exercises held at the close of the spring semester. Students who complete degree requirements during the fall, spring, or summer semesters are eligible to participate in commencement. Graduation applications are online @ [my.nmsu.edu](http://my.nmsu.edu).

## **Academic Appeals**

Procedure for Initiating Grievance Complaints: This procedure has been established to provide a method to resolve undergraduate student grievances at the lowest administrative level in a fair and expeditious manner. For the purpose of this procedure, grievances are limited to alleged violations of university policy or procedures by the university or its employees, disputes with faculty and/or alleged unfair treatment. Usually this method is used to appeal a grade the student feels was not justified. Under no condition should these policies be used when the student has allegedly violated the University Code of Conduct or a contractual agreement, and at no hearing should either party have a lawyer. Any student who believes that he/she has been unjustly treated within the academic process may proceed as far as necessary in the steps detailed below. Should the alleged grievance not involve a faculty member or course, the student is to appeal directly to the department head in whose area the alleged grievance occurred or to the Vice President for Academic Affairs.

1. **Appeal to the faculty member:** The student is to submit a written appeal to the faculty member within thirty (30) days after the start of the semester following the semester in which the alleged grievance occurred. Semester in this case refers to fall and spring only. If the alleged grievance occurs during the summer session, the student is to submit an appeal no later than thirty (30) days into the fall semester following the summer session in which the alleged grievance occurred. The faculty member and the student are to discuss the problem. The faculty member will submit a written report outlining his or her decision to the student and department head within ten (10) working days of receipt of the student's written appeal.
2. **Appeal to the department head:** If a decision satisfactory to the student cannot be reached, the student may submit a written appeal to the department head in which the course in question is taught. This is to be done within ten (10) days of the receipt of the faculty member's written decision. The faculty member, the department head, and the student are to meet to discuss the problem. The department head will send a written response outlining his or her decision to the student and faculty member within ten (10) days of this meeting.
3. **Appeals to the Vice President for Academic Affairs:** If a satisfactory decision cannot be reached among the department head, the faculty member, and the student, the student or the faculty member may submit a written statement of appeal to the Vice President for Academic Affairs. This is to be done within ten (10) working days after the receipt of the written decision by the department head. The Vice President for Academic Affairs may request a written recommendation from the college Academic Appeals Board. Should this be the case, the Academic Appeals Board will conduct a hearing with the student and faculty member (not necessarily at the same time) to review the merits of the appeal. They may also ask for supporting evidence for or against the appeal. The Academic Appeals Board will submit the written recommendation to the Vice President for Academic Affairs within five (5) working days following the conclusion of their process. The Vice President for Academic Affairs may meet with the student, faculty member, and department head to discuss the appeal (not necessarily at the same time). The Vice President for Academic Affairs will submit a written response outlining his or her decision to the student, faculty member, department head, and Campus President within ten (10) days of the last meeting.
4. **Appeals to the Campus President:** The Campus President may, at his or her discretion, review the appeal upon the

written request of the student or faculty member and render a final decision. An appeal to the Campus President is the last step in the appeals process and the Campus President's decision cannot be appealed further. Should the Campus President not choose to review the appeal, the decision of the Vice President for Academic Affairs is final.

5. **Exceptions to the time involved:** The Vice President for Academic Affairs may waive the normal time frame for appeals for compelling reasons. Regardless of circumstances, academic appeals must be initiated with the course instructor within two years of the conclusion of the semester or summer session in which the course was taken.
6. **Enrollment:** A student need not be enrolled at the university to initiate an appeal.

#### **Academic Appeals Board**

An academic appeals board will be appointed by the Vice President for Academic Affairs to hear student appeals. The appeals board will consist of three faculty members and two students.

#### **Maintenance of Records**

Instructors and/or departments shall keep records used to compute individual grades for two years after the completion of a course. If a grade has been appealed, these records shall be kept for at least two years after completion of the appeal. Departments may require that records be kept for longer periods.

#### **Academic Misconduct**

Students at NMSU are expected to observe and maintain the highest academic, ethical, and professional standards of conduct. Any student found guilty of academic misconduct shall be subject to disciplinary action. Academic misconduct includes, but is not limited to, the following actions:

1. Cheating or knowingly assisting another student in committing an act of cheating or other forms of academic dishonesty;
2. Plagiarism, which includes, but is not necessarily limited to, submitting examinations, themes, reports, drawings, laboratory notes, undocumented quotations, computer-processed materials, or other material as one's own work when such work has been prepared by another person or copied from another person;
3. Unauthorized possession of examinations, library materials, or laboratory materials;
4. Unauthorized changing of grades on an examination, in an instructor's grade book, or on a grade report; or unauthorized access to academic computer records;
5. Nondisclosure or misrepresentation in filling out applications or other university records in, or for, academic departments or colleges.



## Student Conduct

The policies and procedures related to student conduct are published in the NMSU Carlsbad campus Student Handbook available from the Office of Student Services. The Vice President for Student Services serves as the NMSU Carlsbad Campus Discipline Officer for student misconduct. The Vice President for Academic Affairs serves as the Hearing Officer for academic misconduct. The Student Handbook can also be located on the web site *carlsbad.nmsu.edu*.

## Academic Standing

Please see section on incomplete, I, grades to determine the effect of removal of I grades on academic standing.

## Academic Warning, Probation and Suspension

When students do not maintain adequate academic standing, they begin a progress of Academic Warning to Academic Probation I and II, and finally to Academic Suspension. Each stage imposes more structure and limitations on the student in order to help the student return to normal academic standing. The intent is not to punish, but to help the student return to normal academic standing and success. Since some of these limitations involve limitations on the number of credit hours, students on Probation or Suspension may be subject to loss of financial aid. It is the responsibility of the student to determine the impact of their changed academic standing on their financial aid. Notification to students of academic warning probation or suspension appears on the student's grade report at the end of each grading period.

## Academic Warning

Issued only once, the first time a student's cumulative GPA falls below a 2.0 while in good academic standing. The Vice President for Academic Affairs will send the student a letter detailing the consequences should the cumulative grade point remain below a 2.0 at the conclusion of the semester.

### While under Academic Warning the following restrictions apply:

1. The student may be required to enroll in a 3-hour special study skills/time management course specifically designed for students on Academic Warning for the first time, or an equivalent approved by the Vice President for Academic Affairs.
2. Students will be required to enter into a contract with their advisor, approved by the Vice President for Academic Affairs that place further stipulations on Academic Warning. The contract may include, but is not limited to the following:
  - The student may be required to take at least one repeat course to try to greatly improve the GPA.
  - Except for the special study skills/time management course, the student's coursework may be restricted to the

major.

- The student may be required to get tutoring help.
- The student may be required to see an academic counselor on a specified time schedule.
- The number of hours a student may register for may be restricted (due to extenuating circumstances such as the student's workload commitments).

The Vice President for Academic Affairs may place the student on Academic Probation I should the student not adhere to the stipulations of the contract.

If the student's semester GPA is less than a 2.0, and the cumulative GPA remains below a 2.0 at the end of the semester on Academic Warning, the student is placed on Academic Probation I. If the semester GPA is greater than 2.0 but the cumulative GPA is still less than 2.0, the student will remain on Academic Warning. If the cumulative GPA is greater than a 2.0 at the end of the semester then the student is returned to regular status.

## Summer Courses

A student may use summer classes to try to get warning or probationary status removed. Under no circumstances may a student on Academic Warning or Academic Probation be allowed to register for an overload. Academic Warning status is continued if the student withdraws from the university. Probation or suspension status applies to all subsequent enrollments.

## Academic Probation I

This occurs when a student under Academic Warning has a semester GPA less than 2.0, and the cumulative GPA remains below 2.0 at the conclusion of the semester. Or, if the student maintains a semester GPA greater than 2.0 while on Academic Probation I but the cumulative GPA is still less than 2.0. Under Academic Probation I the following conditions apply:

1. The student cannot enroll in more than 13 hours of coursework during the semester. Note: Students that fall below 12 credits in any one semester will jeopardize their financial aid. Should this occur, students should see the associate dean in their college as soon as possible to try to implement corrective measures.
2. The student will enter into a contract of individualized education plan with the student's advisor and approved by the Vice President for Academic Affairs that place further stipulations on Academic Probation I. The Vice President for Academic Affairs may place the student on Academic Probation II or Academic Suspension should the student not adhere to the stipulations of the contract.
3. Students on Academic Probation receiving educational benefits from the Veterans' Administration must obtain counseling from the Office of Veterans' Programs.

The student must maintain a semester GPA equal to or greater than 2.0 until such time that the cumulative GPA is greater than 2.0 at which time the student goes back to regular status. Until the latter happens the student remains on Academic Probation I. The student will be placed on Academic Probation II if unable to maintain a 2.0 semester GPA, and the cumulative remains below a 2.0 GPA, while under Academic Probation I.

### **Academic Probation II**

Issued when a student falls below a semester 2.0 GPA, and the cumulative remains below a 2.0 GPA, while on Academic Probation I. Or, if the student maintains a semester GPA greater than 2.0 while on Academic Probation II but the cumulative GPA is still less than 2.0.

1. The student cannot enroll in more than 7 hours of coursework during the semester.
2. As with rule 2 under Academic Warning and Academic Probation I and at the discretion of the Vice President for Academic Affairs, the student will be required to enter into a contract with the student's advisor, and approved by the Vice President for Academic Affairs, to place further stipulations on Academic Probation II.

The Vice President for Academic Affairs may place the student on Academic Suspension should the student not adhere to the stipulations of the contract.

The student must maintain a semester 2.0 GPA or higher until the cumulative GPA reaches a 2.0 or higher at which time the student is placed on regular status. A student unable to maintain a semester GPA of 2.0 or higher, and the cumulative remains below 2.0 GPA, while under Probation II will be placed on Suspension.

### **Transfer Students**

Students (admitted under special provisions) whose transcripts indicate less than a 2.0 GPA are admitted on Academic Probation I.

### **Continuing in Probationary Status**

Student may continue to enroll while on Academic Probation I or II provided they maintain a semester GPA of 2.0 or higher. They are continued on that same level of Academic Probation if they withdraw from the university while on Academic Probation.

### **Removal of Academic Probation**

Such academic standing is removed when the cumulative GPA is raised to 2.0 or higher, with the following exceptions: (1) a transfer student may not remove probation by summer work alone; (2) if an I grade is removed after the student has enrolled, the new grade's effect on academic standing is based on its inclusion with grades for the term for which the student is enrolled; (3) exercise of the Adjusted Credit Option does not change academic status until subsequent grades are earned.

### **Academic Suspension**

When a student does not achieve a semester 2.0 GPA or higher, and the cumulative remains below a 2.0 while under Academic Probation II, the student is placed on Academic Suspension. Students under Academic Suspension are not allowed to take NMSU courses while under suspension. Students on Academic Suspension must sit out a minimum of 1 semester and then petition the Vice President for Academic Affairs to be removed from Academic Suspension. At this time the suspension status will be evaluated for possible removal. Should the suspension be lifted, the student is placed on Academic Probation II until such time that the cumulative GPA equals or exceeds a 2.0. At the discretion of the Vice President for Academic Affairs, the student will enter into a contract approved by the Vice President for Academic Affairs and the student's academic advisor setting stipulations to have the suspension removed. Failure to adhere to the contract will return the student to Academic Suspension. Under certain conditions, a student may be re-admitted at NMSU under regular status while under Academic Suspension when satisfactory progress has been demonstrated at another college or university. Credits earned at another university or college while under Academic Suspension from NMSU or another university or college will be accepted by NMSU only after the student demonstrates satisfactory progress over a period of two semesters after being re-admitted or admitted to NMSU. Acceptance of transfer credits that count toward degree requirements is still governed by the rules established by the student's respective college or campus.

### **Effect of Summer Attendance**

Students suspended at the close of the spring semester may have their Academic Suspension rescinded if they attend one or both of the following summer sessions at NMSU or one of its Community College colleges. Such attendance must raise the combined spring semester and summer GPA to 2.0 or better. A certification of eligibility to attend summer sessions at NMSU after a spring semester Academic Suspension is available to the suspended student who wished to attend summer sessions at other institutions.

### **Disciplinary Probation and Suspension**

NMSU expects all students to regard themselves as responsible citizens on campus and in the community. Repeated misconduct and major violations will cause the student to be subject to immediate suspension or expulsion from the university.



# Academics Support Services, Costs, Campus Resources, Student Activities

## Adult Basic Education and GED Preparation

The Adult Education (AE) Division offers adults the opportunity to begin and/or complete a basic education through the twelfth grade. AE also provides a variety of educational programs and student support services that can help individuals achieve their goals and transition to college. A complete education improves one's opportunities for obtaining or retaining employment and/or going to college and can provide a person with a sense of accomplishment. AE instructional programs and classes include basic literacy, English as a second language (at various levels), EL/Civics, GED®, (high school equivalency diploma), college preparation, U.S. citizenship, computer literacy, and work readiness. Practical living skills, employment and training, and student success principles are also emphasized throughout the AE curriculum. Student support services include basic skills assessments, student orientations, self-paced studies, advising and referral services, student success skills, tutoring on an individual and small-group basis, and assistance with college transition. For more information about the AE program, visit us at the AE Office at New Mexico State University Carlsbad; room 207; call (575)234-9254 or email us at [bjasso@nmsu.edu](mailto:bjasso@nmsu.edu); [ttemptlet@nmsu.edu](mailto:ttemptlet@nmsu.edu); or [zues@nmsu.edu](mailto:zues@nmsu.edu).

## Community Education

NMSU Carlsbad Community Education offers lifelong learning to individuals of all ages seeking educational options for the purpose of personal enrichment and self-improvement. Personal enrichment courses offered are in topics such as art, music, cooking, pottery, computer skills, yoga and welding. Course instructors range from retired professionals, NMSU faculty members to business owners. Most of the courses are affordable and can be taken in several hours to several weeks on our campus. Additionally, taking classes with NMSU Community Education allows the student to meet other people with the interest or hobby she would like to pass on. If someone is interested in teaching a class with Community Education, that person should call (575)234-9247 or (575)234-9248 or visit the Community Education Office on campus in office 1A or 1B.

## Service Learning Opportunities

A variety of NMSU Carlsbad courses may include Service Learning options. Service learning programs involve students in activities that address local needs while developing their academic skills and commitment to their community. Service Learning is a teaching and learning strategy that connects meaningful community service with instruction and reflection to enrich the learning experience, teach civic responsibility, and strengthen communities. Participants in Service Learning master important curriculum content by making connections between what they are studying in the NMSU classroom and its many applications. The four pillars of Service Learning are the academic focus in the NMSU classroom, the service that meets a community need, reflecting on the experience, and strengthened civic responsibility. For more information on Service Learning Opportunities at NMSU Carlsbad call (575)234-9247 or (575)234-9248 or visit the Community Education Office on campus in office 1A or 1B.

## Learning Assistance Center

The Learning Assistance Center (L.A.C.) provides instructional support for students at NMSU Carlsbad. The goals of the Learning Assistance Center include tutoring students for a wide variety of developmental and college-level courses, helping students improve their study and learning skills, and connecting students to the network of support available at the university and within the community.

The Learning Assistance Center oversees the following:

Coursework:

- Individualized coursework: Curriculum for specific learning needs through UNIV 110, UNIV 111, and COLL 155.
- Tutoring for credit: Students may be eligible for math and/or English tutoring credit through CCDS, Developmental Skills courses.

Services:

- Individual and Group Tutoring: Scheduled academic course assistance by qualified tutors for a wide variety of courses. Visit the Learning assistance Center for more information.
- Math tutoring for all CCDM and MATH courses through MATH 121G.

- Learning and Study Skills: Assistance with a variety of needs from learning style assessment to time management. Visit the Learning Assistance Center for more information.
- Test Prep: Tutoring, books, and online preparation for COMPASS and ACT.

Dragon Naturally Speaking: Computer program that translates verbal speech into typed text. Available for use by appointment with priority given to students receiving ADA accommodations.

All services are offered free of charge to qualified NMSU Carlsbad students. Courses are offered for credit and adhere to the university tuition schedule. Students must be admitted to NMSU Carlsbad to access all services and courses. Students may receive credit for Learning Assistance Center services through the following course titles: UNIV 110, Personal Learning Skills I, UNIV 111, Personal Learning Skills II, COLL 155: Tutoring for Math/English, or CCDS, Developmental Skills courses (tutorial support for math, English and/or reading). Students registering for any of these courses must follow their regular course registration process and pay for each course at the applicable college tuition rate. All registered students must meet with a tutor within the first week of classes. These courses are graded on an S/U basis.

For more information about this service or its offerings, call (575)234- 9317, visit the Learning Assistance Center in Room 253 or 254, or visit our website at carlsbad.nmsu.edu. Learning Assistance Center is open from 8 a.m. to 6 p.m. Monday through Thursday, and from 8 a.m. to 12 p.m. on Fridays during the Fall and Spring semesters. Summer hours are determined at the end of the spring semester.

## Developmental Programs and Services

The mission of the Developmental Education Program at NMSU Carlsbad is to help students cultivate the knowledge, skills and attitudes necessary for success in college-level curriculum by providing quality instruction and academic support that encourages students to be active participants in the learning process.

New students are placed into developmental education courses based on their ACT and/or COMPASS placement testing scores. The course placement level is determined based on system-wide standardized “cut-off” scores. The university strongly recommends that all required developmental education coursework be started during the first year of enrollment.

Students must pass all developmental coursework with a grade of “C” or higher, in order to move on to the next course in

the sequence. Students who earn less than a “C” in a course will be required to repeat that course and must obtain the required minimum grade before moving to the next course in the sequence. Please note that credit earned in developmental coursework is not applied toward any degree or certificate at NMSU Carlsbad, but completion of developmental coursework may be a requirement for any degree or certificate. Credit for developmental coursework is included in the credit calculations for financial aid. Most developmental courses are offered for 4 credits, which includes 3 credits of instruction and 1 credit of laboratory time to practice skills taught during instruction. A variety of course instructional formats may be offered. Please refer to the semester course schedule or visit the Learning Assistance Center for more information regarding specifics for each course section.

### Developmental Courses and Course Sequence

#### Developmental Reading

CCDR 101, Intro to Basic Reading..	.... 4 cr.
CCDR 103N, Comp Rdng Dvlpmnt	.... 4 cr.
CCDR 105N, Fnd of Acadmc Read	.... 3 cr.
CCDR 110N, Effective College Rdg	.... 3 cr.

#### Developmental English Sequence

CCDE 105N, Effctv Comm Skills...	.... 4 cr.
CCDE 110N, General Composition	.... 4 cr.

#### Developmental Math Sequence

CCDM 100N, Math Prep/Coll Success	.... 4 cr.
CCDM 103N, Pre-Algebra	.... 4 cr.
CCDM 105N, Math Prep/Pre-Algebra	.... 5 cr.
CCDM 112N, Dvlpmntl Algebra I	.... 4 cr.
CCDM 113N, Dvlpmntl Algebra II	.... 4 cr.
CCDM 114N, Algebra Skills...	.... 4 cr.

CCDM 105N, an accelerated mathematics preparation and pre-algebra review sequence, which can be taken by those students who have recently had math.

\*CCDM 112N/113N, a slower paced (two semester) basic algebra review sequence, which should be taken by those students who have not had math for at least a year, received a “C” in high school Algebra, or received a “C” in CCDM 103N (Pre-Algebra).

\*\*\*COLL 155, Tutoring for Math/English.. . . . . 2 cr.

\*\*\*May be taken concurrently with MATH 120 and MATH 121G and any college-level English. Graded on an S/U scale, based on the number of tutoring hours required. Students must contact the Tutor Coordinator in the TEAM Center prior to the start of the semester to receive additional information and sign a contract agreement that stipulates the number of required tutoring hours.

Students may only enroll for a total of 2 credits of COLL 155 per semester and course may be repeated in subsequent semesters for a maximum of 8 credits.

\*\*\*\*UNIV 110, Personal Learning Skls I. . . . . 1 cr.  
 \*\*\*\*UNIV 111, Personal Learning Skls II. . . . . 1 cr.  
 \*\*\*\*Requires the student to design a curriculum of study to meet individualized learning goals. Graded on a S/U scale, based on the number of hours completed and amount of progress made during the semester. Students must contact the Tutor Coordinator in the TEAM Center prior to the start of the semester to receive additional information and sign a contract agreement that stipulates the number of required hours and dictates the curriculum to be followed. The course may be repeated in subsequent semesters for a maximum of 3 credits.

**College Level English Courses**

ENGL 111G, Rhetoric and Composition. . . . . 4 cr.  
 This course is required for all degree programs. Also, this course should be taken only by those who either initially “placed” into the course (by placement testing) or by those who have first successfully completed CCDE 110N prior to enrollment in the course.

**College Level Math Courses**

MATH 111, Fndmntls Elem Math I. . . . . 3cr. (2+2P)  
 MATH 112G, Fndmntls Elem Math II. . . . . 3 cr. (2+2P)  
 MATH 120, Intermediate Algebra. . . . . 3 cr.  
 MATH 121G, College Algebra. . . . . 3 cr.  
 MATH 142G, Calc/Biol/Mgmt Sci I. . . . . 3 cr.  
 MATH 190G, Trig and Precalculus . . . . . 4 cr.  
 MATH 191G, Calculus/Analytic Geom I. . . . . 4 cr.  
 MATH 192G, Calculus/Analytic Geom II. . . . . 4 cr.  
 MATH 210G, Math Appreciation. . . . . 3 cr.  
 MATH 230, Matrices/Linear Program . . . . . 3 cr.  
 STAT 251G, Stats for Bus/Behavioral Sci . . . . . 3 cr

Before students enroll for any college level course listed above, they should have satisfied the following requirements: (a) have taken and passed any stated prerequisite course with a grade of “C” or better, or (b) have taken the placement examination earlier, the results of which must affirm a student’s placement at a college course level. Courses beyond the developmental level may or may not be degree required (check the degree plan first).

**Library and Media Center**

A center of academic activity, the Library and Media Center is the first choice for information for students at NMSU Carlsbad. The campus library supports learning and instruction with online and traditional learning resources. The library ensures equal access to

learners across the spectrums of educational level, physical ability, and location. General and discipline based instruction is available for classes, individual students, and faculty by appointment.

Through active collaboration with faculty, the library offers academic and vocational resources relevant to student achievement and success. Information literacy training is embedded into the physical and on-line learning environments to ensure technological readiness vital to personal and professional achievement in today’s global economy.

The library is an open, vibrant, and student-centered environment that encourages discovery and academic advancement through active learning. A welcoming space for individual and collaborative interaction, the library is open six days a week, 10 hours each weekday and 4 hours on Saturday during the fall and spring semesters. Remote access to selected online resources is available to current students, faculty and staff.

The library also serves as a public gateway for the Carlsbad and Eddy county communities by providing access to both print and specific online resources delivered through the State Library of New Mexico.

**Library Hours**

Monday – Thursday 8:00 am to 8:00 pm  
 Friday 8:00 am to 5:00 pm  
 Saturday 10:00 am to 2:00 pm  
 The library follows the NMSU Carlsbad calendar and is closed whenever the campus is closed.

**Learning Technology Center**

The LTC, located in Room 211 of the Main Building, is open Monday-Thursday, 8am to 6pm and Friday 8am to 5pm. The office phone number is 234-9263. The Center (LTC) provides technology support for faculty, staff and students at New Mexico State University Carlsbad. The goals of the LTC include teaching faculty and students on the learning management system (LMS) and other web technologies, providing professional development for faculty and staff, helping faculty improve course design and development for online learning, and assisting students with technology issues.

For students, the LTC provides training for the following topics:

- Google Docs
- Learning Management System
- Mobile learning devices basics (iPhone/iPad, Android, etc)
- NMSU E-mail,
- NMSU Skydrive

## Computer Center

The Computer Center at NMSU Carlsbad operates four instructional computer classrooms and a general use computer lab. All computers are networked and provide access to the Internet. The Center maintains a staff of full time and student employees to provide users with technical support. The Computer Center general lab phone number is 234-9402.

### Student Computer Accounts

All students enrolled for credit courses are given a computer account that allows them access to the Internet during the semester(s) in which they are enrolled. This account also allows a student access to server based storage for homework.

### Video Conferencing and Satellite Transmission

Video conferencing services, including two way interactive television, are also provided for staff and community organizations through the Help Desk in the Business Office. To schedule a computer classroom or a video conferencing room contact the Help Desk at 234-9406.

## Counseling and Student Development Center

The Counseling and Student Development Center (CSDC) located in Room 107 coordinates services for students in the following areas:

### Academic Advising

The Counseling and Student Development Center advisors help students interpret placement test scores, select and schedule classes, explore majors, develop a degree plan, and evaluate progress towards degree completion. Students are assigned to an advisor based on the last two digits of their Aggie ID#; please contact the CSDC for more information.

### Career and Job Placement Services

The CSDC offers various resources to help students evaluate and choose potential career options including Choices, a web-based career guidance software program, and various workshops. We provide assistance with general job search strategies and guidance regarding how to write effective cover letters and resumes. The Counseling and Student Development Center coordinates work-study positions for eligible students as well as cooperative and internship opportunities.

### Student Government (ASNMSU Carlsbad)

We coordinate campus activities through Associated Students of NMSU Carlsbad, the campus student government association, and host events on student development issues such as drug and alcohol abuse prevention, suicide prevention, mental and physical

wellness, leadership, and cultural diversity.

### Student Accessibility Services

The Student Accessibility Services (SAS) Coordinator works to provide reasonable accommodations to qualified students with disabilities and to assure that campus programs and services are accessible to students with disabilities.

Students may request services by completing these steps in order:

1. Make an appointment with the Student Accessibility Services Coordinator to self-identify as a student with a disability.
2. Submit a "Petition for Accommodation" and proper documentation to the SNS Office.
3. Finalize accommodations for the semester with the SAS Coordinator.
4. Take faculty notification letters listing approved accommodations to each instructor and return to the SNS office within five working days.
5. Submit a "Petition for Continuation of Services" each semester.

### Grievance Procedure for Students with Disabilities

NMSU Carlsbad has adopted an internal grievance procedure providing for the prompt and equitable resolution of complaints alleging any action prohibited by Section 504 of the Rehabilitation Act of 1973 (Section 504) or of the Americans with Disabilities Act of 1990 (ADA), which prohibit discrimination on the basis of disability.

Students are encouraged to attempt to resolve any problems or complaints they might have at the local college level first, when possible. Students should initially contact the NMSU Carlsbad Student Accessibility Services Coordinator (575-234-9321) in an effort to resolve problems related to the need for or provision of special accommodations, as well as those that are related to access needs or the equalization of learning opportunity. While students are encouraged to resolve concerns at the college level, any student may contact the EEO/ADA and Employee Relations Director at (575) 646-3333 or (575) 646-7802 TDD at New Mexico State University's main campus at any time.

### Informal Complaint Procedure

The student may wish or choose to resolve the complaint on an informal basis (such may include mediation, a letter to the professor, a telephone call, or some other resolution amenable to the student). A written confidential record of the final outcome or resolution will be retained with the Student Accessibility Services Coordinator.

### Formal Grievance Procedures

If the student wishes to formalize a grievance, completion of the

New Mexico State University, EEO Grievance Form is required by the EEO/ADA and Employee Relations Office (575-646-3333) within ten (10) working days of the occurrence. (Note: The 10- day filing period may be extended by written request to the EEO/ ADA and Employee Relations Office with consent of the student). In order to expedite the filing process, formal New Mexico State University, EEO Grievance Forms are available in the Student Accessibility Services, Room 107.

The foregoing procedures are implemented to:

- Protect the substantive due process rights of students with disabilities;
- Assure that NMSU Community College at Carlsbad complies with the Americans with Disabilities Act of 1990 and Section 504 of the Rehabilitation Act of 1973, as amended.

For further information contact the Student Accessibility Services Coordinator, the Director of Counseling and Student Development, the Vice President for Student Services; or NMSU's EEO/ADA and Employee Relations Director.

### **Barnes & Noble Bookstore**

The Barnes & Noble Bookstore is a full service operation intended to meet the needs of the students, faculty, and staff of NMSU Carlsbad and is located on the lower level. The bookstore sells required course textbooks, both new and used. The bookstore also has school supplies and NMSU Carlsbad insignia clothing items. Students may receive a full refund if books are returned during the first week of classes with a receipt. With a proof of schedule change and a receipt, a full refund will be given during the first 30 days of classes. The textbook refund period for summer and mini-sessions is one week only from the start of class. Additionally, the bookstore buys back books year-round. The bookstore is open during posted hours. For any additional information, please visit us at [www.nmsubookstore.com](http://www.nmsubookstore.com).

### **Tuition and Fees**

Refer to the current Schedule of Classes, published each Fall, Spring and Summer for the current tuition and fees.

#### **Laboratory Fees**

Courses in computer science, physical education, manufacturing and craft skills, nursing, science, welding and other courses, may require students to pay fees to acquire special supplies. Some music courses also require additional fees. These fees are approved by the NMSU Board of Regents, and are listed

each semester in the Schedule of Classes published by NMSU Carlsbad.

#### **Payment Plans**

By enrolling in classes as NMSU, a student makes a financial commitment to pay the tuition and fee charges associated with that enrollment. The enrollment action constitutes a financial obligation between the student and NMSU that all proceeds of this agreement will be used for educational purposes and constitute an educational loan pursuant to 11 U.S.C. § 523(a) (8).

Students withdrawing after the stated refund dates remain liable for full tuition and fee charges. Collection costs incurred in the event of delinquency shall be at the expense of the borrower. Although the University accepts payment via student financial aid and third party sponsorship, the responsibility for payment remains with the student. If financial aid is not granted or if third party sponsors do not pay within a reasonable period, the student will be required to pay the full amount due.

The university reserves the right to cancel the registration of any student who fails to pay, when due, any indebtedness to the university. Academic credits, transcripts, and diplomas will be withheld until all financial obligations are cleared.

#### **Refund of Tuition**

NMSU Carlsbad has a tuition refund policy. The percent of refund is dependent upon the date a student drops a class or classes. Students are advised to refer to the policy on refunds, as printed each semester in the Schedule of Classes.

#### **Reduced Tuition Rates for Senior Citizens**

Senior citizens (persons aged sixty-five years or older) who are New Mexico residents are eligible for reduced tuition under the Senior Citizens Reduced Tuition Act. The cost will be \$5.00 in tuition per semester credit, plus a \$3.00 administrative fee, for a total of \$8.00. There may be additional required fees such as course or lab fees. Senior citizens may register for a maximum of 6 semester credits at the reduced rate, on a space available basis.

### **Financial Aid, Scholarships, Grants, and Loans**

The university administers an extensive program of grants, scholarships, and loans. Our students are awarded Federal and State of NM aid including grants, scholarships, work-study and loans. Students must apply annually for financial aid at [www.fafsa.gov](http://www.fafsa.gov). General eligibility requirements to receive financial aid are as follows:

- Only students who are U.S. citizens, nationals, or permanent residents are eligible to apply for financial aid.
- Students must be in good academic standing and must be



making satisfactory progress toward a degree or certificate\*.

- All male students must be registered with Selective Services (you must register between the ages of 18 and 25).
- Undergraduate students must be enrolled at least half-time (six credit hours) for most (except PELL grants) federal aid programs and full time (12 credit hours or more) for most scholarships.
- Need must be clearly established for need-based financial assistance.
- Students must have a high school diploma or a GED, or must have passed an independently administered test approved by the U.S. Department of Education.
- Students must sign a statement verifying that they do not owe a refund on a federal grant or loan; that they are not in default on a federal student loan and that they will use the financial aid only for educational purposes.
- No student will be denied financial assistance on the basis of age, color, disability, gender, national origin, race, religion, sexual orientation, or veteran status.
- Go to <http://fa.nmsu.edu/index.html> to find details regarding policies related to Student Financial Aid.

For detailed information concerning academic progress policy, scholarships, grants, work study, and loans, stop by the Financial Aid Office, Room 111, NMSU Carlsbad. You can reach us by telephone at (575) 234-9230 or toll free 1-888-888-2199.

### Veterans' Benefits Certification

The Veterans' Administration (V.A.) has approved NMSU Carlsbad courses for study by veterans and others who qualify for veterans' educational assistance. Processing of applications and certifications takes from 4 to 6 weeks and should, therefore, be initiated well in advance of course registration. Veterans must bring their course schedule to the NMSU Carlsbad Student Services Office each semester for continued certification. The Veterans' Administration toll free number is 1-888-442-4551.

Veterans must maintain satisfactory attendance, conduct, and progress. If the veteran does not meet the standards set by NMSU Carlsbad, the certifying official must notify V.A., at which time V.A. will discontinue benefits.

If the university has liability claims filed against it as a result of a veteran failing to meet compliance requirements of the Veterans' Administration, the university will not release any academic records on the veteran until such time as the veteran has reimbursed the federal government for funds drawn in violation of those requirements.

### Workforce Development & Contract Training

The Workforce & Community Development Program (W&CD) provides career preparation through a variety of offerings. Academic certificates and degrees are offered in six areas of technology specialization. Craft apprenticeship training is provided through a training agreement between W&CD and the Carlsbad Community Development Corporation. Contract training for local businesses and industrial firms is provided to meet the specific needs of a company or business segment.

W&CD is located in three facilities in Eddy County. The Welding Technology, HACR (Heating, Air Conditioning, & Refrigeration) Technology, Mechanical Machining laboratories, CAD (Computer-Aided Drafting), CAM (Computer-Aided Manufacturing), and Electronics laboratories are all located on the main campus in Carlsbad. Also, Math for Trades and Industrial Safety (OSHA) will be offered online under Blackboard and Pod Casting will also be available.

Through articulation agreements with the Carlsbad and Artesia public school systems, high school students can earn dual credit for certain vocational classes taught by W&CD instructors at the schools or one of our facilities. W&CD is an NCCER (National Center for Construction Education and Research) Accredited Training Facility, using their nationally recognized curricula to train craft apprentices and others for entry-level positions in the building and industrial trades.

For more information, contact the W&CD office located in Room 227 on the NMSU Carlsbad campus, 1500 University Drive or call (575) 234-9460 or (575) 234-9470.

### Small Business Development Center

NMSU Carlsbad's Small Business Development Center (SBDC) is located in downtown Carlsbad at 221 S. Canyon Street in the heart of the local business district. The SBDC offers free, quality counseling and guidance for business owners and prospective owners.

The SBDC is designed with you in mind. Whether you have been in business for some time or are just starting out, we can help you address the multitude of issues and problems you encounter each day.

Our experienced staff can help you

- Explore business ownership opportunities in Eddy County
- Start a new business or make an established one more efficient and profitable
- Create alternatives for problem solving
- Measure your success potential

- Improve your management skills
- Access a wealth of business resources

### **Business Education**

If needed, special arrangements can be made for SBDC staff to come to your business site to discuss strategies. Seminars and workshops are available to improve your business and management skills. Classes are scheduled through the SBDC by contacting 885-9531.

### **Center for Resource Information**

The SBDC has a resource library that can benefit you in retrieving business information. Why work alone? SBDC will help you find a competitive advantage through professional business publications. Internet access is available at the center for clients. Let the Small Business Development Center help you and your business reach full potential. Call us today to discuss your needs at 575-885-9531.

## **Citizens' Professional Advisory Councils**

The Citizens' Professional Advisory Councils (CPAC) represent individual community stakeholder groups primarily aligned with workforce and academic instructional areas of the college. CPAC gives community stakeholders a chance to influence the college's role in the community and communicate the needs of individual organizations and businesses as they relate to the college. Advisory Councils are comprised of local employers and organizational representatives and involve valued constituencies in NMSU Carlsbad's planning for the educational needs of its students. Again, CPAC events allow the college and its community stakeholders to gather together to communicate external stakeholder wants and needs. CPAC members come from the business community, public education, law enforcement, research laboratories, government agencies, private industry, media, etc. CPAC events take place once or more a semester and involve dinners, breakout sessions, focus groups, etc.

## **Student Organizations & Activities**

### **Associated Students**

The Associated Students of NMSU Carlsbad represents the student body. The Associated Students is composed of members who are elected, at the close of each semester, to serve during the next two regular academic semesters (summer sessions excluded).

Any student enrolled for a minimum of 6 semester credits, possessing a 2.0 grade-point average or higher, and is in good standing is eligible for election to Associated Students. Responsibilities of the Associated Students include identifying

qualifications for the recognition of student organizations and related funding, student social activities, student activity budgets, student publications, student elections, students' academic freedoms, and the use of facilities dedicated for students' social, cultural, recreational and service activities. Associated Students is open to all students meeting qualifications; students are encouraged to join and actively participate in the student government. For more information, call 234-9335.

### **Phi Theta Kappa**

Phi Theta Kappa is the international honor society for two-year colleges. To be eligible, students must have a 3.5 GPA, have completed 12 credit hours of non-developmental course work, be of good character, and be recommended by faculty. Members are invited to membership once per semester. Members are eligible for special conferences, workshops, and scholarships. For more information, call 575-234-9371

### **Beta Alpha Delta**

NMSU Carlsbad supports the Beta Alpha Delta Chapter of the American Criminal Justice Association/Lambda Alpha Epsilon. The association is a National Criminal Justice professional type fraternity. The college has a very active chapter that raises funds to attend regional and national conference/competitions, perform community service projects and campus service projects, and have fun. Membership in the association gives the students an opportunity to improve their CJ skills and knowledge, network with people from all over the United States, and further Criminal Justice Professionalism. Membership is open to anyone who has an interest in Criminal Justice. There are three levels of participation for competition purposes: lower division academic, upper division academic and professional. For further information, please call 575-234-9354.

### **Student Nurses Association**

The NMSU Carlsbad Student Nurses Association is an organization for nursing students designed to contribute to nursing education, to provide programs representative of the fundamental interests and concerns of nursing students and to aid nursing students in the development of the whole person, and to promote and encourage collaborative relationships with nursing and health related organizations. Membership is open to pre and current nursing students. For more information, call 234-9300.

WorkKeys® scores for vocational certificates  
2015-2016 catalog

Certificate	Reading for Information Level	Locating Information Level	Applied Mathematics Level
Accounting	Dev. Ed.	Dev. Ed.	Dev. Ed.
Banking	Dev. Ed.	Dev. Ed.	Dev. Ed.
Business Office Tech – Medical Transcription option	4	4	4
Business Office Tech - Office Assistant option	4	4	4
<b>Building Trades</b>			
Building Trades	4	4	4
Drafting and Graphics Technology – Architectural	4	4	3
Drafting and Graphics Technology – General Drafting	4	4	3
Electrical Trades	3	4	3
Heating, Air Conditioning & Refrigeration	4	5	5
Industrial Maintenance Technician – Electrical option	3	4	3
Industrial Maintenance Technician – Mechanical option	3	4	3
Welding Technology	4	4	4
<b>Automotive Technology</b>			
Auto Refinishing	4	4	4
Structural Collision Repair	4	4	4
Non Structural Collision Repair	4	4	4
Automotive Technology	4	4	4
<b>Digital Media</b>			
Digital Animation	5	4	5
Digital Graphics	5	4	5
Digital Storytelling	5	4	5
Digital Video Game Animation	5	4	5
Digital Video Media Production	5	4	5
Digital Video	5	4	5
Microcomputer Applications	5	4	5
<b>Health Information Technology</b>			
Health Information Technology	Dev. Ed.	Dev. Ed.	Dev. Ed.
Practical Nursing	Dev. Ed.	Dev. Ed.	Dev. Ed.
<b>Early Childhood Administrative</b>			
Early Childhood Administrative	4	4	4
Heritage Interpretation	Dev. Ed.	Dev. Ed.	Dev. Ed.

# Required Courses

## The New Mexico General Education Common Core

General Education at NMSU provides all students with a broad foundation and common framework upon which to develop knowledge and skills, social consciousness and respect for self and others; thus, enabling them to function responsibly and effectively now and in the future. General education courses at NMSU can be identified by the G suffix.

The New Mexico General Education Common Core are designated general education courses guaranteed to transfer to any New Mexico public college or university. A complete list of approved courses can be found on the New Mexico Higher Education Department web site at [www.hed.state.nm.us](http://www.hed.state.nm.us). The current approved NMSU courses are listed below under each of the five general education areas:

### Area I: Communications

(Select 9-10 credits one from each sub group)

#### **English Composition – Level 1**

ENGL 111G, Rhetoric and Composition . . . . . 4

#### **English Composition – Level 2**

ENGL 203G, Business and Professional Communication.. 3

ENGL 211G, Writing in the Humanities/Social Sciences .. 3

ENGL 218G , Technical/Scientific Communication . . . . . 3

#### **Oral Communication**

COMM 253G , Public Speaking . . . . . 3

COMM 265G, Principles of Human Communication . . . . . 3

### Area II: Mathematics/Algebra (Select 3 credits)

MATH 112G, Fundamentals of Elem Math II . . . . . 3

MATH 121G, College Algebra . . . . . 3

MATH 142G, Calculus for Biological/Management Sciences I 3

MATH 190G, Trigonometry and Precalculus . . . . . 4

MATH 191G/191GL, Calculus/Analytic Geometry I . . . . . 4

MATH 192G/192GL, Calculus/Analytic Geometry II . . . . . 4

MATH 210G, Math Appreciation . . . . . 3

MATH 291G, Calculus/Analytic Geometry III . . . . . 3

STAT 251G, Statistics for Business/Behavioral Sciences.. 3

### Area III: Laboratory Science (Select 8 credits)

ASTR 105G, The Planets . . . . . 4

ASTR 110G, Introduction to Astronomy . . . . . 4

BIOL 111G/111GL, Natural History of Life . . . . . 4

BIOL 211G/211GL, Cellular and Organismal Biology . . . . . 4

CHEM 110G , Principles and Applications of Chemistry. . . 4

CHEM 111G, General Chemistry I . . . . . 4

CHEM 112G, General Chemistry II . . . . . 4

GEOG 111G, Geography of the Natural Environment. . . . 4

GEOL 111G, Survey of Geology . . . . . 4

GEOL 212G, The Dynamic Earth. . . . . 4

PHYS 110G, Great Ideas of Physics . . . . . 4

PHYS 211G/211GL, General Physics I . . . . . 4

PHYS 212G/212GL, General Physics II . . . . . 4

PHYS 215G/GL, Engineering Physics I. . . . . 4

PHYS 216G/GL, Engineering Physics II . . . . . 4

### Area IV: Social/Behavioral Sciences (Select 6-9 credits)

ANTH 120G, Human Ancestors. . . . . 3

ANTH 125G, Introductions to World Cultures. . . . . 3

ANTH 201G , Introduction to Anthropology . . . . . 3

ANTH 202G, Intro to Archaeology & Physical Anthr. . . . . 3

ANTH 203G, Intro to Language & Cultural Anthr. . . . . 3

C EP 110G, Human Growth and Behavior . . . . . 3

C J 101G, Introduction to Criminal Justice. . . . . 3

ECON 251G , Principles of Macroeconomics. . . . . 3

ECON 252G , Principles of Microeconomics. . . . . 3

GEOG 112G, World Regional Geography . . . . . 3

GEOG 120G, Culture and Environment . . . . . 3

GOVT 100G, American National Government. . . . . 3

GOVT 110G, Introduction to Political Sciences. . . . . 3

GOVT 150G, American Political Issues. . . . . 3

GOVT 160G, International Political Issues . . . . . 3

HLS 150G, Personal Health and Wellness. . . . . 3

LING 200G, Introduction to Language. . . . . 3

PSY 201G , Introduction to Psychology . . . . . 3

SOC 101G, Introduction to Sociology . . . . . 3

SOC 201G, Contemporary Social Problems. . . . . 3

S WK221G, Introduction to Social Welfare. . . . . 3

### Area V: Humanities and Fine Arts (Select 6-9 credits)

ART 101G , Orientation in Art. . . . . 3

ENGL 115G, Perspectives on Literature . . . . . 3

ENGL 116G, Perspectives on Film. . . . . 3

ENGL 220G, Introduction to Creative Writing . . . . .	3
ENGL 244G, Literature and Culture. . . . .	3
HIST 101G, Roots of Modern Europe. . . . .	3
HIST 102G, Modern Europe . . . . .	3
HIST 201G, Introduction to Early American History . . . . .	3
HIST 202G, Introduction to Recent American History . . . . .	3
MUS 101G, Introduction to Music . . . . .	3
THTR 101G, Introduction to Theater . . . . .	3

**Alternatives for Meeting General Education**

**Requirements:** Students taking nine or more credits in a specific subject area, even though the courses are not designated as General Education courses, will have met the general education requirements for that subject area. For example, a student may complete ART 150, 155, and 156 (9 hours) and thereby satisfy one course from the Area V: Humanities and Fine Arts category, even though none of those courses carries a G suffix. Please check with the office of the college associate dean or with college advisors.

**Transferring Courses to Fulfill the New Mexico General Education Common Core**

During the 2005 New Mexico Legislative session, Senate Bill 161, consistent with requirements of state law (Chapter 224 of the Laws of New Mexico, 1995 as amended) was signed into law to further enhance and facilitate the articulation of general education courses among New Mexico’s colleges and universities. In accordance with policies established by the New Mexico Higher Education Department, designated general education core courses successfully completed at any regionally accredited public institution of higher education in New Mexico are guaranteed to transfer to any New Mexico public institution. Students who have decided on a major and/or an institution at which to complete their studies should consult with an academic advisor at that particular institution to determine the most appropriate course selections. Students enrolling for the first-year of study at a New Mexico college or university and considering possible transfer into a certificate and/or degree program at another institution are encouraged to take the courses approved for transfer during their freshman and sophomore years of study.

**Transferring Courses within Degree Programs**

To facilitate the transfer of courses within certain degree programs, New Mexico colleges and universities have collaborated to develop transferable discipline modules. These are composed of an agreed upon number of hours and courses. When discipline module courses are taken in addition to the 35-hour general education core, the total number of hours in a transfer module are approximately 64.

**Inter-Institutional Transfer Guides and Catalogs**

Students who have selected a field of study and/or the institution where they wish to graduate are advised to consult the transfer guide or catalog for that institution for more current and detailed advice to guide their course selection. Formal published transfer guides between most New Mexico community colleges and NMSU are available at the community college and the appropriate NMSU college advisement center.

**Student Responsibility**

New Mexico’s colleges and universities have collaborated to produce guides to assist students who plan to transfer before completing a program of study. Course modules are designed to help students select courses carefully so that they may transfer with little or no loss of credit. However, planning for effective transfer within maximum efficiency is ultimately the student’s responsibility. Responsible transfer planning includes early and regular consultation with the intended degree-granting institution to assure that all pre-transfer course work will meet the requirement of the desired degree.

**Complaint Procedure for Transfer Credit Appeal**

All New Mexico public post-secondary institutions are required to establish policies and practices for receiving and resolving complaints from students or from other complainants regarding the transfer of course work from other public institutions in the state. A copy of NMSU’s complaint policy may be obtained from the Office of the Registrar or from the Deputy Secretary for Academic Affairs, Higher Education Department, New Mexico School for the Deaf Campus, 1068 Cerrillos Road, Santa Fe, New Mexico 87505-1650.

# Fields of Study

NMSU Carlsbad offers 100-200 level courses which, when taken in specified sequence with additional academic requirements, normally lead to a certificate or an associate degree.

A certificate represents a sequence of specified courses which offer instruction in specific knowledge, competencies, and skills to meet certain predetermined qualifications specified and/or required by a given vocation or profession. The certificate normally represents approximately one year of full-time college study, or its equivalence in the depth and quality of related learning experiences, and is intended to train and otherwise prepare graduates for entry into the workforce immediately upon completion of their studies. Consequently, the emphasis of a certificate curriculum is to provide graduates with the knowledge, competencies, and skills to succeed in a specific vocation or profession, without immediate need for additional academic preparation.

An associate degree is a 100-200 level undergraduate degree and is awarded to graduates of prescribed lower-division curricula normally representing approximately two years' of full-time college study, 66 or more semester credits), or its equivalent in the depth and quality of related learning experiences. The Associate of Arts degree normally implies a liberal education orientation, and the Associate of Applied Science degree normally implies a more applied orientation in a given discipline, which may align with a specific vocational or professional field. NMSU Carlsbad also awards an Associate Degree in General Studies. Although graduates awarded the Associate of Applied Science degree intend to enter the workplace immediately, most graduates of the Associate of Arts degree intend to continue their academic preparation towards the completion of a baccalaureate degree and should be mindful of what courses may transfer easily towards their major area of study at the receiving institution.

## **Prerequisites to Associate Degrees**

Students must demonstrate sufficient proficiency of their basic skills in math, English, and reading to qualify for enrollment in ENGL 111G, Freshman Composition I (4 credits); MATH 120, Intermediate Algebra (3 credits); and COLL 108, Academic Reading and Study Skills (1-4 credits). All entering students are required to take specific placement tests in the areas of English, math, and reading to determine their eligibility for entrance to college-level courses.

## **Prerequisites to Certificates**

Graduates in certificate programs must demonstrate proficiency in reading, math, and English as evidenced by sufficient scores on the Workkeys® assessment. Additional remediation may be required to attain these scores.

## **Requirements Specific to Associate Degrees**

The following requirements apply to students seeking to graduate with an associate degree from NMSU Carlsbad:

1. Students must maintain a cumulative grade-point average of 2.0 or higher.
2. Students must take their last 15 semester credits through NMSU Carlsbad or any NMSU campus (cannot include CLEP, challenge exams, or transfer credit).
3. Students must complete a minimum of 66 approved semester credits.
4. Student must complete ENGL 111G with a grade of C or better.

## **Preparation for Transfer to Baccalaureate Study**

Students planning to attend a baccalaureate-granting institution, at either NMSU-Las Cruces or elsewhere, are encouraged to contact the institution they intend to attend, and to secure all application materials and information pertaining to their intended programs of study.

Requirements for baccalaureate degrees awarded through the NMSU-Las Cruces include specific general education courses and requirements and are listed in the undergraduate catalog published annually by NMSU-Las Cruces. Students planning to complete the course requirements for an Associate of Arts degree, with the intention of later attending NMSU-Las Cruces to complete an undergraduate degree are encouraged to consult with the advisor(s) at NMSU Carlsbad, or with the appropriate dean at NMSU-Las Cruces, to identify specific program requirements.

NMSU Carlsbad offers courses up to the first two years of study to prepare students for a variety of Bachelor degree programs. NMSU Carlsbad offers associate degrees and certificates in a variety of fields

## **Associate Degree Programs**

Associate of Arts  
Associate of Arts in Heritage Interpretation  
Associate of Science  
Associate of Science in Engineering  
Business Office Technology  
    Accounting  
    Medical Transcription and Records  
    Word Processing  
Criminal Justice  
Education  
Early Childhood Education  
General Studies  
Nursing  
Pre-Business  
Social Services

## **Associate of Applied Science**

Agriculture (not available 2015-2016)  
Automotive Body Collision Repair  
Automotive Technology  
Building Technology  
Business Management  
Computer and Information Technology  
    IT Specialist  
    Networking  
    Programming  
Digital Media Technology  
    Digital Animation  
    Digital Graphics  
Digital Signage (not available 2015-2016)  
    Digital Storytelling  
    Digital Video  
    Digital Video Game Animation  
    Digital Video Media Production (Film Industry)  
Drafting and Graphics Technology  
    Architectural Technology  
    General Drafting  
Electronics Technology  
Emergency Medical Technician Paramedic  
Facilities Maintenance Technology (not available 2015-16)  
    Facilities Maintenance  
    Industrial Maintenance  
Fire Science Technology (not available 2015-2016)  
Hazardous Material  
Health Information Technology  
Health Physics (not available (2015-2016)  
Heating, AC, and Refrig. (Not available 2015-2016)  
Hospitality and Tourism  
Industrial Maintenance Technician  
    Electrical  
    Mechanical  
Manufacturing Technology

Electronic Assembly  
Manufacturing Process  
Surgical Technology  
Welding Technology

## **Certificate Programs**

Accounting  
Automotive Body Collision Repair  
    Automotive Refinishing  
    Non-Structural Collision Repair  
    Structural Collision Repair  
Automotive Technology  
Banking  
Building Trades  
Business Office Technology  
    Medical Transcription and Records  
    Office Assistant  
Computer and Information Technology  
Microcomputer Applications  
Digital Media Technology  
Digital Animation  
Digital Graphics  
Digital Signage (not available 2015-2016)  
Digital Storytelling  
Digital Video  
Digital Video Game Animation  
Digital Video Media Production (Film Industry)  
Drafting and Graphics Technology  
    Architectural Drafting  
    General Drafting  
Early Childhood Education Provisional Administrator (not available 2015-2016)  
Electrical Trades  
Emergency Medical Technician  
    Basic  
    Intermediate  
Facilities Maintenance Technology (not available 2015-16)  
    Facilities Maintenance  
    Industrial Maintenance  
Fire Science (not available 2015-2016)  
New Mexico General Education Common Core  
Hazardous Materials Technology (not available 2015-2016)  
Health Information Technology  
Heating, Air Conditioning and Refrigeration (not available 2015-2016)  
Heritage Interpretation  
Industrial Maintenance Technician  
    Electrical  
    Mechanical  
Microcomputer Applications  
Practical Nursing  
Security Guard Level One (not available 2015-16)  
Solar-Wind Energy (not available 2015-2016)  
Welding Technology

# Certificates and Associate Degrees

## Academic Program Areas

Agriculture, Consumer, and Environmental Science	Arts and Sciences	Business	Computer Science and Engineering
Agriculture Hospitality and Tourism	Arts Digital Media General Studies Heritage Interpretation Science	Accounting Banking Business Management Business Office Technology Pre-Business	Computer Science Engineering
Education	Health and Social Services	Manufacturing Sector Development	
Education Early Childhood Education	Emergency Medical Services Health Information Tech. Nursing Surgical Technology	Auto Body Collision Repair Automotive Technology Building Trades Drafting & Graphics Technology Electrical Trades Electronics Technology Heating, Air Conditioning and Refrigeration Industrial Maintenance Technician Welding	





# Associate of Arts and General Studies

The **New Mexico General Education Common Core Certificate** is an academic credential that recognizes accomplishment of the New Mexico Common Core and serves as an intermediate step towards completion of an associate degree for students who plan to transfer to a four-year college or university.

The **Associate Degree in General Studies** equips students with the freedom to design their own two-year program by selecting classes that meet their needs governed only by departmental prerequisites. Note: A student who has previously earned an associate degree from NMSU or from any other institution is ineligible to receive an Associate Degree in General Studies.

The **Associate of Arts Degree** allows students to complete the first two years of most bachelor degree programs. Students should choose electives to meet other requirements for their planned baccalaureate degree such as foreign language requirements or specific requirements within the major.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

Additional course classes may be required based on placement test results and/or course prerequisites. Visit with an advisor to create a customized plan

## New Mexico General Education Common Core Certificate

### General Education Common Core.....36

Area I: English & Communication .....10

ENGL 111G, Rhetoric & Composition .....4

ENGL 203G, Business/Prof. Communication or

ENGL 211G, Writing in Hum./Soc. Sciences or

ENGL 218G, Technical/Prof. Communication.....3

COMM 253G, Public Speaking or

COMM 265G, Principles of Human Communication .....3

Area II: Mathematics .....3

Complete 1 "G" course from MATH or STAT

Area III: Laboratory Science.....8

Complete 2 Science "G" courses with a lab from ASTR, BIOL, CHEM, ES, GEOG (must be GEOG 111G if selected), GEOL, or PHYS

Area IV & V: Social/Behav. Sci. & Hum/Fine Arts.....15

Complete 2-3 Social/Behavioral Science "G" courses from ANTH, CJ, CEP, ECON, GEOG must be GEOG 112G or 120G if selected), GOVT, PHLS, LING, PSY, SOC, or SWK

Complete 2-3 Humanities/Fine Arts "G" courses from ART, ENGL, HIST, MUS, or THTR

**TOTAL CREDITS** .....36

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

Fall	Cr.	Spring	Cr.
ENGL 111G	4	ENGL 203G/211G/218G	3
Area II	3	COMM 253G or 265G	3
Area III	4	Area III	4
Area IV/V	3	Area IV/V	3
Area IV/V	3	Area IV/V	3
	17		16
		Summer	Cr.
		Area IV/V	3
			3

## Associate of Arts Degree

**NM General Education Common Core Certificate**.....36

Branch Requirement.....3

COLL 101, College & Life Success .....3

Electives.....27

*No more than 9 credits may be from any combination of: BOT, CMT, COLL, NURS, RDG, OE, UNIV (excluding UNIV 150), or applied ART/MUS/THTR. Also, no more than 9 credits of PE may apply.*

**TOTAL CREDITS** .....66

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

### 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	Area II	3
ENGL 111G	4	ENGL 203G/211G/218G	3
Area III	4	Area III	4
Area IV/V	3	Area IV/V	3
Elective	3	Elective	3
	17		17

### 2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
COMM 253G/265G	3	Area IV/V	3
Area IV/V	3	Area IV/V	3
Elective	3	Elective	3
Elective	3	Elective	3
Elective	4	Elective	4
	16		16

## Associate in General Studies

**Branch and Gen. Ed Common Core Requirements**..... 7

COLL 101, College/Life Success.....3

ENGL 111G, Rhetoric & Composition .....4

Electives .....59

**TOTAL CREDITS** .....66

# Agriculture

The **Associate of Applied Science in Agriculture** focuses on the general principles and practice of agricultural research and production and prepares individuals to apply this knowledge to the solution of practical agricultural problems. The curriculum includes instruction in basic animal, plant, and soil science as well as agricultural business.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Applied Science in Agriculture

**Branch Course Requirement..... 3**  
 COLL 101, College & Life Success .....3

**General Education Core Requirements .....13**  
 ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Business & Professional Communication.....3  
 COMM 253G, Public Speaking or  
     COMM 265G, Princ. of Human Communication.....3  
 PSY 201G, Introduction to Psychology or  
     SOC 101G, Introductory Sociology.....3

**Core Curriculum Requirements .....32**  
 AGE 100, Intro to Agricultural Economics & Business .....3  
 AGE 210G Survey of Food & Agricultural Issues .....3  
 AGE 236, Agribusiness Management Principles.....3  
 AGRO 100G, Introductory Plant Science.....4  
 AGRO 250, Plant Propagation.....3  
 ANSC 100, Introductory Animal Science.....3  
 ANSC 100L, Introductory Animal Science Lab.....1  
 ANSC 200, Introduction to Meat Animal Production.....3  
 AXED 105, Techniques in Agric. Mechanization.....3  
 AXED 201G, Effective Leadership/Comm. Ag. Orgs .....3  
 WELD 105, Introduction to Welding.....3

**Related Requirements .....19**  
 CS 110, Computer Literacy .....3  
 BIOL 111G/GL, Natural History of Life and Lab.....3  
 ECON 251G, Principles of Macroeconomics or  
     ECON 252G, Principles of Microeconomics .....3  
 MATH 120, Intermediate Algebra.....3  
 GOVT 100G, American National Government.....3  
 Humanities elective.....3  
     Complete 1 class from ART 101G, ENGL 115G, ENGL 116G,  
     ENGL 220G, ENGL 244G, HIST 101G, HIST 102G, HIST 201G,  
     HIST 202G, MUS 101G, MUS 201G, or THTR 101G

**TOTAL CREDITS.....67**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ANSC 100 & 100L	4	ANSC 200	3
AGRO 100G	4	AGE 210G	3
COLL 101	3	AXED 201G	3
ENGL 111G	4	ENGL 203G	3
CS 110	3	MATH 120	3
		WELD 105	3
	18		18

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
AGE 100	3	AGE 236	3
AXED 105	3	AGRO 250	3
COMM 253G or 265G	3	PSY 201G or SOC 101G	3
ECON 251G or 252G	3	GOVT 100G	3
BIOL 111G & lab	4	Humanities elective	3
	16		15

# Accounting and Banking

The **Certificate in Accounting** prepares students for work within the managerial field of accounting. In addition to accounting principles, practices, and software, the curriculum focuses on business law, management, and operation of the microcomputer and common computer applications.

The **Certificate in Banking** prepares students for work in the banking industry. The curriculum focuses on accounting, banking principles, business law, communications, management, marketing, spreadsheets, and operation of the microcomputer and common computer applications.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Accounting

### Core Curriculum Requirements.....33

ACCT 200, A Survey of Accounting.....	3
ACCT 221, Financial Accounting.....	3
ACCT 222, Management Accounting.....	3
BUSA 111, Business in a Global Society.....	3
BLAW 230, Business Law.....	3
BMGT 150, Income Taxation.....	3
MGT 201, Introduction to Management.....	3
OECS 200, Accounting on Microcomputers.....	3
OECS 211, Word Processing Applications.....	3
OECS 215, Spreadsheet Applications.....	3
OECS 220, Database Applications & Design.....	3

### TOTAL CREDITS.....33

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ACCT 200	3	MGT 201	3
BUSA 111	3	BLAW 230	3
OECS 211	3	OECS 215	3
	9		9

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ACCT 221	3	ACCT 222	3
OECS 220	3	OECS 200	3
		BMGT 150	3
	6		9

## Certificate in Banking

### Core Curriculum Requirements.....33

ACCT 251, Management Accounting.....	3
ACCT 252, Financial Accounting.....	3
BCIS 110, Intro to Computerized Info Systems.....	3
BLAW 230, Business Law.....	3
BMGT 112, Principles of Banking.....	3
BMGT 211, Marketing for Bankers.....	3
BMGT 225, Introduction to Commercial Lending or BMGT 213, Consumer Lending.....	3
ECON 251G, Principles of Macroeconomics.....	3
ENGL 203G, Business & Professional Communications.....	3
MGT 201, Introduction to Management.....	3
OECS 215, Spreadsheet Applications.....	3

### TOTAL CREDITS.....33

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ACCT 221	3	ACCT 222	3
BCIS 110	3	BMGT 211	3
BMGT 112	3	BLAW 230	3
	9		9

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OECS 215	3	ECON 251G	3
BMGT 225 or 213	3	MGT 201	3
ENGL 203G	3		
	9		6

# Automotive Technology

The **Automotive Technology** program teaches individuals the technical knowledge and skills needed to repair, service, and maintain all types of automobiles. Students study brake systems, electrical systems, engine performance and repair, suspension and steering, automatic and manual transmissions and drive trains, and heating and air condition systems. The program is competency-based as required by the National Automotive Foundation (NAFEE).

## Graduation Requirements

**Certificate in Automotive Technology:** WorkKeys® scores of level 4 in Reading for Information, Locating Information, and Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Automotive Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Automotive Technology

<b>Core Curriculum Requirements</b> .....	<b>37</b>
AUTO 112, Basic Gasoline Engines .....	5
AUTO 117, Electronic Analysis/Tune-up of Gas Engines .....	5
AUTO 119, Manual Transmission/Clutch .....	5
AUTO 120, Electrical Systems .....	4
AUTO 125, Brakes .....	5
AUTO 126, Suspension, Steering & Alignment.....	5
AUTO 127, Basic Automatic Transmission or AUTO 132, Automotive A/C and Heating Systems.....	4
AUTO 137, Fuel Systems & Emission Controls.....	4
<b>Related Program Requirements</b> .....	<b>6</b>
OECS 102, Career Readiness Certification Prep.....	1
AUTO 118, Mathematics for Mechanics or OECS 118, Mathematics for Technicians.....	3
DRFT 190, Finding & Maintaining Employment.....	2
<b>TOTAL CREDITS</b> .....	<b>43</b>

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
AUTO 112	5	AUTO 117	5
AUTO 120	4	AUTO 125	5
AUTO 126	5	AUTO 137	4
	14		14

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
AUTO 119	5	AUTO 127 or 132	5
AUTO or OECS 118	3	DRFT 190	2
		OECS 102	1
	8		8

## Associate of Applied Science in Automotive Technology

<b>Branch Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success.....	3
<b>General Education Common Core Requirements</b> .....	<b>13</b>
COMM 253G, Public Speaking or COMM 265G, Principles of Human Communications.....	3
ENGL 111G, Rhetoric and Composition .....	4
ENGL 203G, Business & Professional Communication.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3
<b>Core Curriculum Requirements</b> .....	<b>43</b>
AUTO 112, Basic Gasoline Engines .....	5
AUTO 117, Electronic Analysis & Tune-up of Gas Engines .....	5
AUTO 118, Mathematics for Mechanics or OECS 118, Mathematics for Technicians.....	3
AUTO 119, Manual Transmission/Clutch .....	5
AUTO 120, Electrical Systems .....	4
AUTO 125, Brakes .....	5
AUTO 126, Suspension, Steering & Alignment.....	5
AUTO 127, Basic Automatic Transmission or AUTO 132, Automotive A/C and Heating Systems.....	4
AUTO 137, Fuel Systems & Emission Controls.....	4
AUTO 221, Cooperative Experience I.....	3
<b>Related Requirements</b> .....	<b>9</b>
BMGT approved elective .....	3
DRFT 190, Finding and Maintaining Employment.....	2
OECS 105, Introduction to Microcomputer Technology or OECS 227, Computer Applications for Technicians .....	3
OECS 102, Career Readiness Certification Prep.....	1
<b>Approved Elective</b> .....	<b>3</b>
<b>TOTAL CREDITS</b> .....	<b>71</b>

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
AUTO 112	5	AUTO 117	5
AUTO 120	4	AUTO 125	5
AUTO 126	5	AUTO 137	4
COLL 101	3	COMM 253G or 265G	3
	17		17

Summer	Cr.
ENGL 111G	4
Elective	3
	7

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
AUTO 119	5	AUTO 127 or 132	5
AUTO or OECS 118	3	AUTO 221	3
ENGL 203G	3	DRFT 190	2
OECS 105 or 227	3	OECS 102	1
		BMGT elective	3
		PSY 201G or SOC 101G	3
	14		16

# Auto Body Collision and Repair

The **Auto Body Collision and Repair** program prepares individuals for employment in the auto body repair industry in positions such as Automotive Refinish Technician, Auto Body Painter, Collision Technician, and Automotive Body Technician.

Students in Automotive Refinishing learn surface preparation, paint safety, refinishing fundamentals; application of acrylic enamel and base coat/clear coat refinishing systems as well as how to match paint type and color; color theory, evaluation, matching, multiple panel paint blending techniques.

The Collision Repair curriculum has two certificates: Structural Repair and Non-Structural Repair. Structural repair students learn how to diagnose and repair various types of damage, identify structural components, separate spot welds, position and weld new body panels in place. Non-Structural Repair students learn how to repair heavy collision damage using current I-CAR repair standards and procedures.

## Graduation Requirements

**Certificate in Automotive Refinishing, Structural Repair, and Non-Structural Repair:** WorkKeys® scores of level 4 in Reading for Information, Locating Information, and Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Auto Body Collision and Repair:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits completed at NMSU.

## Certificate in Automotive Refinishing

<b>Core Curriculum Requirements</b> .....	<b>25</b>
AUTO 118, Math for Mechanics .....	3
AUTO 145, Shop Management.....	3
AUTO 172, Intro to Automotive Refinishing.....	4
AUTO 174, Intermediate Automotive Refinishing.....	4
AUTO 176, Automotive Color Adjustment/Blending.....	4
AUTO 178, Automotive Overall Refinishing.....	4
AUTO 221, Cooperative Experience I.....	3
<b>TOTAL CREDITS</b> .....	<b>25</b>

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Fall	Cr.	Spring	Cr.
AUTO 118	3	AUTO 174	4
AUTO 145	4	AUTO 178	4
AUTO 172	4	AUTO 221	3
AUTO 176	4		
	14		11

## Certificate in Non-Structural Collision Repair

<b>Core Curriculum Requirements</b> .....	<b>26</b>
AUTO 118, Math for Mechanics .....	3
AUTO 161, Non-Structural Repair .....	4
AUTO 162, Advanced Non-Structural Repair I.....	4
AUTO 163, Advanced Non-Structural Repair II.....	4
AUTO 164, Auto Industry Collision Repair I.....	4
AUTO 165, Auto Industry Collision Repair II.....	4
AUTO 190, Sheet Metal Welding.....	3
<b>TOTAL CREDITS</b> .....	<b>26</b>

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Fall	Cr.	Spring	Cr.
AUTO 161	4	AUTO 118	3
AUTO 162	4	AUTO 163	4
AUTO 164	4	AUTO 165	4
AUTO 190	3		
	15		11

## Certificate in Structural Collision Repair

<b>Core Curriculum Requirements</b> .....	<b>26</b>
AUTO 118, Math for Mechanics .....	3
AUTO 161, Non-Structural Repair .....	4
AUTO 162, Advanced Non-Structural Repair I.....	4
AUTO 163, Advanced Non-Structural Repair II.....	4
AUTO 181, Frame and Structural Repair.....	4
AUTO 182, Structural Panel Replacement.....	4
AUTO 190, Sheet Metal Welding.....	3
<b>TOTAL CREDITS</b> .....	<b>26</b>

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Fall	Cr.	Spring	Cr.
AUTO 118	3	AUTO 162	4
AUTO 161	4	AUTO 163	4
AUTO 181	4	AUTO 182	4
AUTO 190	3		
	14		12

## Associate of Applied Science in Auto Body Collision Repair

<b>Branch Requirement .....</b>	<b>3</b>
COLL 101, College/Life Success.....	3
<b>General Education Common Core Requirements.....</b>	<b>13</b>
COMM 253G, Public Speaking or COMM 265G, Principles of Human Communications.....	3
ENGL 111G, Rhetoric and Composition .....	4
ENGL 203G, Business & Professional Communication.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology .....	3
<b>Core Curriculum Requirements .....</b>	<b>60</b>
AUTO 118, Math for Mechanics .....	3
AUTO 120, Electrical Systems .....	4
AUTO 145, Shop Management.....	3
AUTO 221, Cooperative Experience I.....	3
AUTO 161, Non-Structural Repair .....	4
AUTO 162, Advanced Non-Structural Repair I.....	4
AUTO 163, Advanced Non-Structural Repair II.....	4
AUTO 164, Auto Industry Collision Repair I .....	4
AUTO 165, Auto Industry Collision Repair II.....	4
AUTO 172, Intro to Automotive Refinishing .....	4
AUTO 174, Intermediate Automotive Refinishing.....	4
AUTO 176, Automotive Color Adjustment/Blending.....	4
AUTO 178, Automotive Overall Refinishing.....	4
AUTO 181, Frame and Structural Repair.....	4
AUTO 182, Structural Panel Replacement.....	4
AUTO 190, Sheet Metal Welding.....	3
<b>TOTAL CREDITS .....</b>	<b>73</b>

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

#### 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
AUTO 118	3	AUTO 120	4
AUTO 145	4	AUTO 161	4
AUTO 172	4	AUTO 174	4
AUTO 190	3	AUTO 221	3
	13		11

#### 2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
AUTO 162	4	AUTO 163	4
AUTO 176	4	AUTO 178	4
COLL 101	3	ENGL 111G	4
	11		12

#### 3<sup>rd</sup> year

Fall	Cr.	Spring	Cr.
AUTO 164	4	AUTO 181	4
AUTO 165	4	AUTO 182	4
COMM 253G or COMM 265G	3	PSY 201G or SOC 101G	3
	11		11

# Building Technology

The **Building Technology** offers hands-on instruction that prepares students for an entry level job in the construction industry. The curriculum covers how to design projects, study blueprints, measure and arrange materials, safely use power tools, and understanding national and local building codes. Students enrolled in this program may specialize in certain construction tasks or prepare to be a general contractor for residential construction.

## Graduation Requirements

**Certificate in Building Trades:** WorkKeys® scores of level 4 in Reading for Information, Locating Information, and Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Building Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Building Trades

<b>Core Curriculum Requirements</b> .....	<b>28-36</b>
BCT 100, Building Trades I .....	8
BCT 104, Woodworking Skills I .....	3
BCT 105, Woodworking Skills II .....	3
BCT 110, Blueprint Reading for Building Trades .....	4
BCT 200, Building Trades II .....	8
BCT 255, Special Topics .....	1-6
BCT 290, Special Problems in Building Technology .....	1-4

**TOTAL CREDITS** ..... **28-36**

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
BCT 100	8	BCT 200	8
BCT 104	3	BCT 105	3
	11		11

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
BCT 110	4	BCT 290	1-4
BCT 255	1-6		
	5-10		1-4

## Associate of Applied Science in Building Technology

<b>Branch Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success .....	3

<b>Common Core Requirements</b> .....	<b>13</b>
COMM 265G, Principles of Human Communication .....	3

ENGL 111G, Rhetoric & Composition .....	4
ENGL 218G, Tech/Scientific Communication or ENGL 203G, Business/Professional Communication .....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology .....	3

<b>Related Requirements</b> .....	<b>12</b>
DRFT 105, Technical Drawing for Industry .....	3
DRFT 130, General Building Codes .....	3
DRFT 160, Construction Take-Off/Estimating .....	3
BCT 118, Math for Building Trades .....	3

<b>Core Curriculum Requirements</b> .....	<b>36</b>
BCT 100, Building Trades I .....	8
BCT 104, Woodworking Skills I .....	3
BCT 105, Woodworking Skills II .....	3
BCT 110, Blueprint Reading for Building Trades .....	4
BCT 200, Building Trades II .....	8
BCT 221, Cooperative Experience I .....	3
BCT 255, Special Topics .....	4
BCT 290, Special Problems in Building Technology .....	3

**Electives** .....

**TOTAL CREDITS** ..... **67**

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
BCT 100	8	BCT 200	8
BCT 104	3	BCT 105	3
DRFT 130	3	DRFT 160	3
COLL 101	3	ENGL 111G	4
	17		18

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
BCT 110	4	BCT 290	3
BCT 255	4	BCT 221	3
BCT 118	3	COMM 253G or 265G	3
DRFT 105	3	PSY 201G or SOC 101G	3
ENGL 203G or 218G	3	Elective	3
	17		15



# Business Office Technology

The **Business Office Technology** program is for students interested in acquiring or updating skills for employment in an office environment. The curriculum covers basic computer skills as well as software programs such as word processing and spreadsheet applications, record keeping, filing, or database management. At the certificate level, students may complete either the office assistant or medical records and transcription option. The Associate degree offers options in accounting, medical transcription and records, and word processing.

## Graduation Requirements

Certificate in Business Office Technology: WorkKeys® scores of level 4 in Reading for Information, Locating Information, and Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

Associate in Business Office Technology: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

### Certificate in Business Office Technology

#### Core Curriculum Requirements..... 18

BOT 102, Keyboarding: Document Formatting.....	3
BOT 105, Business English .....	3
ENGL 203G, Business & Professional Communication.....	3
BOT 239, Personal Development.....	3
OECS 211, Word Processing Applications .....	3
OECS 215, Spreadsheet Applications .....	3

#### Program Options (choose one)..... 15-16

<u>Medical Transcription &amp; Records</u> .....	16
BIOL 225, Human Anatomy/Physiology I.....	4
BOT 150, Medical Terminology .....	3
BOT 208, Medical Office Procedures.....	3
BOT 223, Medical Transcription I.....	3
OECS 220, Database Application and Design .....	3

<u>Office Assistant</u> .....	15
BOT 106, Business Math .....	3
BOT 110, Records Management.....	3
BOT 202, Keyboarding: Document Production.....	3
BOT 203, Office Equipment & Procedures I.....	3
BOT 207, Machine Transcription .....	3

#### TOTAL CREDITS .....33-34

#### Roadmaps

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	BOT 105	3
BOT 102	3	BOT 239	3
OECS 211	3	ENGL 203G	3
BOT 150 (Med Trns)	3	BOT 225 (Med Trns)	4
BOT 110 (Office)	3	BOT 202 (Office)	3
	(12)		(12-13)

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OECS 215	3	BOT 208 (Med Trns)	3
BOT 223 (Med Trns)	(3)	OECS 220 (Med Trns)	3
BOT 203 (Office)	(3)	BOT 106 (Office)	3
		BOT 207 (Office)	3
	(6)		(6)

### Associate in Business Office Technology

<b>Branch Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success.....	3

#### Common Core Requirements..... 13

COMM 265G, Principles of Human Communication.....	3
ENGL 111G, Rhetoric & Composition .....	4
ENGL 203G, Business/Prof. Communication .....	3
PSY 201G, Introduction to Psychology or	
SOC 101G, Introductory Sociology .....	3

#### Core Curriculum Requirements .....39

<u>Business-Related Courses</u> .....	12
ACCT 200, Survey of Accounting.....	3
BLAW 230, Business Law .....	3
BUSA 111, Business in a Global Society.....	3
MGT 201, Introduction to Management.....	3

#### Business Office Technology Courses .....

BOT 105, Business English .....	3
BOT 106, Business Math .....	3
BOT 110, Records Management.....	3
BOT 203, Office Equipment & Procedures I .....	3
BOT 239, Personal Development.....	3

#### Applied Computer Science Courses .....

OECS 211, Word Processing Applications .....	3
OECS 215, Spreadsheet Applications .....	3
OECS 220, Database Application and Design.....	3
OECS 260, Hypertext Markup Language (HTML) or	
OECS 280, Desktop Publishing I .....	3

#### Program Options (choose one)..... 12-13

<u>Accounting</u> .....	12
ACCT 221, Financial Accounting .....	3
ACCT 222, Management Accounting .....	3

BOT 240, Introduction to Individual Taxation.....3  
 OECS 200, Accounting on Microcomputers.....3

Medical Transcription.....13  
 BIOL 225, Human Anatomy & Physiology I.....4  
 BOT/NURS 150, Medical Terminology .....3  
 BOT 208, Medical Office Procedures.....3  
 BOT 223, Medical Transcription I.....3

Word Processing .....12  
 ACCT 252, Financial Accounting .....3  
 BOT 102, Keyboarding: Document Formatting.....3  
 BOT 202, Keyboarding: Document Production.....3  
 BOT 207, Machine Transcription .....3

**TOTAL CREDITS** .....66-67

**Roadmap**

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ACCT 200	3	BUSA 111	3
BOT 110	3	OECS 211	3
COLL 101	3	OECS 215	3
ENGL 111G	4	ENGL 203G	3
ACCT 221 (Acct.)	(3)	ACCT 222 (Acct.)	(3)
BOT 150 (Med Trns)	(3)	BIOL 225 (Med Trns)	(3)
BOT 102 (Word Proc)	(3)	BOT 202 (Word Proc)	(3)
		PSY 20G or SOC 101G	3
	16		18

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
MGT 201	3	BLAW 230	3
BOT 110	3	BOT 105	3
BOT 239	3	BOT 106	3
COMM 265G	3	OECS 260 or 280	3
OECS 220 (Acct.)	(3)	BOT 240 (Acct.)	(3)
BOT 223 (Med Trns)	(3)	BOT 208 (Med Trns)	(3)
ACCT 221 (Word Proc. & Acct.)	(3)	BOT 207 (Word Proc)	(3)
	15		15

# Business Management

The **Associate of Applied Science in Business Management** prepares students for managerial and supervisory positions in a variety of businesses and industry. The curriculum emphasizes accounting, economics, finance, data analysis, marketing, business communication, and human resources. Students will apply their knowledge and skills through a capstone course as well as a cooperative experience.

## Graduation requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Applied Science in Business Management

**Branch Course Requirement.....3**  
 COLL 101, College & Life Success.....3

## General Education Requirements..... 19

ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Business & Professional Communication or  
 ENGL 218G, Tech/Scientific Communication or  
 BOT 209, Business/Technical Communication .....3  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication.....3  
 BOT 106, Business Math or  
 MATH 120, Intermediate Algebra.....3  
 CS 110, Computer Literacy or  
 OECS 105, Intro to Microcomputer Technology.....3  
 PSY 201G, Introduction to Psychology or  
 SOC 101G, Introductory Sociology.....3

## Related Requirements ..... 21

ACCT 221, Financial Accounting or  
 BOT 120, Accounting Procedures.....3  
 ECON 201G, Introduction to Economics or  
 ECON 251G, Principles of Macroeconomics or  
 ECON 252G, Principles of Microeconomics.....3  
 OECS 215, Spreadsheet Applications or  
 OECS 220, Database Applications & Design or  
 BOT 211, Information Processing or  
 BOT 217, PowerPoint Presentations .....3  
 BMGT 110, Introduction to Business or  
 BUSA 111, Business in a Global Society .....3  
 BMGT 140, Principles of Supervision I or  
 MGT 201, Introduction to Management.....3  
 BMGT 175, Introduction to Business Finance or  
 FIN 206, Introduction to Finance .....3  
 BMGT 210, Marketing or  
 MKTG 203, Introduction to Marketing.....3

## Technical Requirements..... 29

BMGT 201, Work Readiness & Preparation.....2  
 BMGT 221, Cooperative Experience I.....3  
 BMGT 231, Legal Issues in Business or  
 BLAW 316, Legal Environment of Business.....3  
 BMGT 240, Human Relations.....3  
 BMGT 290, Applied Business Capstone .....3  
 General Management Courses.....15

*Choose 5 courses from the following:*

BMGT 212, Supervisory/Leadership Trends.....3  
 BMGT 248, Intro to Quality Management.....3  
 BMGT 250, Diversity in the Workplace.....3  
 BMGT 277, Small Business Management.....3  
 BMGT 280, Intro to Human Resources .....3  
 BMGT 282, Intro to International Business Mgt.....3  
 BMGT 285, Intro to Manufacturing Operations.....3  
 BMGT 286, Intro to Logistics .....3  
 BMGT 287, Intro to Export/Import.....3

**TOTAL CREDITS ..... 72**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	COMM 253G or 265G	3
ENGL 111G	4	ENGL 203G or 218G	3
BOT 106 or MATH 120	3	PSY 201G or SOC 101G	3
CS 110 or OECS 105	3	BMGT 140 or MGT 201	3
ACCT 221 or BOT 120	3	OECS 215, OECS 220, BOT 211 or BOT 217	3
BMGT 201	3	General Mgmt. course	3
	18		18

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ECON 201G, 251G or 252G	3	BMGT 221	3
BMGT 175 or FIN 206	3	BMGT 210 or MKTG 203	3
BMGT 240	3	BMGT 290	3
BMGT 231 or BLAW 230	3	General Mgmt. course	3
BMGT 110 or BUSA 111	3	General Mgmt. course	3
General Mgmt. course	3	General Mgmt. course	3
	18		18

# Computer and Information Technology

The **Certificate in Microcomputer Applications** is designed for students interested in microcomputer operations and systems. Upon completion, students are prepared to take the Microsoft Office Specialist certification exams in Word and Excel.

The **Associate of Applied Science Degree in Computer and Information Technology** equips students for employment which involves the analysis and design of computerized information and management decision systems. Graduates of the program are prepared to take the CompTIA A+ certification exam which demonstrates competency in the maintenance of PCs, mobile devices, operating systems and printers.

## Graduation Requirements

**Certificate in Microcomputer Applications:** WorkKeys® scores of level 5 in Reading for Information, level 4 in Locating Information, and level 5 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Computer and Information Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Microcomputer Applications

<b>Core Curriculum Requirements</b> .....	<b>32</b>
C S 110, Computer Literacy.....	3
COMM 265G, Principles of Human Communications.....	3
OECS 110, Introduction to PowerPoint.....	1
OECS 255, Special Topics.....	1
OECS 125, Operating Systems.....	3
OECS 200, Accounting on Microcomputers.....	3
OECS 209, Computer Graphic Arts.....	3
OECS 211, Word Processing Applications.....	3
OECS 215, Spreadsheet Applications.....	3
OECS 220, Database Application & Design.....	3
OECS 260, Hypertext Markup Language (HTML).....	3
OECS 280, Desktop Publishing I.....	3

**TOTAL CREDITS** ..... **32**

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
CS 110	3	COMM 265G	3
OECS 125	3	OECS 110	1
OECS 211	3	OECS 209	3
OECS 255	1	OECS 215	3
	10		10

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OECS 200	3	OECS 220	3
OECS 260	3	OECS 280	3
	6		6

## Associate of Applied Science in Computer and Information Technology

**Branch Requirement** ..... **3**  
 COLL 101, College/Life Success.....3

**Common Core Requirements**.....**16**  
 COMM 253G, Public Speaking or  
 COMM 265G, Principles of Human Communication.....3  
 ECON 251G, Principles of Macroeconomics or  
 ECON 252G, Principles of Microeconomics.....3  
 ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Business/Professional Communications or  
 ENGL 218G, Technical/Scientific Communications.....3  
 PSY 201G, Introduction to Psychology or  
 SOC 101G, Introductory Sociology.....3

**Related Requirements** .....**21**  
 BCIS 110, Intro to Computerized Info Systems or  
 CS 110, Computer Literacy or  
 ET 120, Computation & Presentation Software.....3  
 MATH 120, Intermediate Algebra or  
 Approved technology-related math course.....3  
 OECS 220, Database Application & Design .....3  
 OECS 221, Cooperative Experience I .....3  
 Business/Computer electives.....6  
 Choose 2 courses from: ACCT 222, BCIS 110, BUSA 111, CS  
 110, ET 120, FIN 206, MGT 201, MKTG 203  
 Approved programming-related course .....3

**Technical Requirements**.....**30-31**  
 OECS 128, Operating Systems-Linux/Unix.....3  
 OECS 185, PC Maintenance & Selection or  
 OECS 227, Computer Applications for Technicians or  
 E T 283, Hardware PC Maintenance.....3  
 OECS 207, Windows.....3  
 OECS 250, Systems Analysis I or  
 OECS 290, Computer Technology Capstone.....3  
 OECS 261, Computer Network Design or  
 E T 153, Intro to Computer Networks or  
 E T 155, Network Operating Systems..... 3-4

**Program Option (choose one)**.....**15**

**IT Specialist Option** .....15  
 Approved computer-related courses

**Networking** .....15  
 Choose from: E T 253, 277, 278, 279; OECS 230, 231, 232, 233,  
 234, 235, 236, 262, 263, 264, 269

Programming .....15  
 Computer-related approved electives .....9  
 Programming electives .....6  
     Choose from: BCIS 122, 222; CS 177; ET 253, 283; OECS  
     140, 141, 150, 192, 193, 195, 196, 216, 218, 235, 245, 246

**TOTAL CREDITS ..... 70-71**

**Roadmap**

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	ECON 251G or 252G	3
ENGL 111G	4	ENGL 203G or 218G	3
MATH 120 or alternate	3	OECS 128	3
BCIS 110, CS 110 or ET 120	3	OECS 207	3
Program option class	3	Program option class	3
		Programming course	3
	16		18

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OECS 220	3	COMM 253G or 265G	3
OECS 185, 227 or ET 283	3	PSY 201G or SOC 101G	3
OECS 261, ET 153 or ET 155	3-4	OECS 250 or 290	3
Program option class	3	OECS 221	3
Bus./Comp. elective	3	Program option class	3
Bus./Comp. elective	3	Program option class	3
	18-19		18

# Criminal Justice

The **Associate in Criminal Justice** is designed for students who are seeking employment in the law enforcement field or wish to transfer to complete a bachelor's degree in criminal justice. The program is broadly interdisciplinary in nature, embracing the study of the humanities, law and the behavioral and social sciences. The curriculum seeks to balance theoretical inquiry with applied knowledge.

Graduates from this two-year program are prepared for careers in criminal justice and related fields of industrial and institutional security. The curriculum prepares students to transfer into NMSU Las Cruces' Bachelor Degree in Criminal Justice at the junior level. Students are advised to choose electives to meet other requirements for their planned baccalaureate degree.

### Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate in Criminal Justice

**Branch Requirement ..... 3**  
 COLL 101, College/Life Success.....3

**Common Core Requirements.....36**

Area I: English & Communications .....10  
 ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Business & Professional Communication or  
 ENGL 211G, Writing in Humanities/Social Sciences or  
 ENGL 218G, Technical & Scientific Communications.....3  
 COMM 253G, Public Speaking or  
 COMM 265G, Principles of Human Communication.....3

Area II: Mathematics.....3  
 Complete 1 "G" course from MATH or STAT

Area III: Laboratory Science..... 8  
 Complete 2 Science "G" courses with a lab from ASTR, BIOL,  
 CHEM, ES, GEOG (must be GEOG 111G if selected), GEOL, or  
 PHYS

Area IV & V: Social/Behav. Sci. & Hum/Fine Arts..... 15  
 Complete 2-3 Social/Behavioral Science "G" courses from ANTH  
 CJ, CEP, ECON, GEOG (must be GEOG 112G or 120G if select-  
 ed), GOVT, PHLS, LING, PSY, SOC, or SWK

Complete 2-3 Humanities/Fine Arts "G" courses from ART,  
 ENGL, HIST, MUS, or THTR

**College of Arts & Sciences 2<sup>nd</sup> Language..... 3-8**  
*Must complete through the 112/212 level based on placement.*

SPAN 111, Beginning Spanish I.....4  
 SPAN 112, Beginning Spanish II .....4  
 SPAN 211, Intermediate Spanish I.....3  
 SPAN 212, Intermediate Spanish II .....3

**Criminal Justice Departmental Requirements..... 15**  
*All CJ courses must be completed with a C or higher*

CJ 101G, Introduction to Criminal Justice .....3  
 CJ 205, Criminal Law I .....3  
 CJ 210, American Law Enforcement System.....3  
 CJ 230, Introduction to Corrections .....3  
 CJ 250, Courts & the Criminal Justice System.....3

**Electives ..... 4-9**  
*CJ 293, Field Experience in Criminal Justice (3 credits) is recommended.*

**TOTAL CREDITS ..... 66**

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
CJ 101G	3	CJ 230	3
COLL 101	3	ENGL 203G/211G/218G	3
ENGL 111G	4	Area II	3
Area III	4	Area III	4
Area IV/V	3	Area IV/V	3
	17		17

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
CJ 205	3	CJ 250	3
CJ 210	3	Elective	3
COMM 253G or 265G	3	Area IV/V	3
Area IV/V	3	Area IV/V	3
Spanish	3-4	Spanish*	3-4
	16-17		16-17

Take elective if SPAN 112/212 is completed prior to this term

# Digital Media Technology

The **Digital Media Technology** program offers instruction and hands-on learning in in graphic design, digital video production, gaming, animation, simulation, and web design. Students may choose from several certificates which also apply towards the Associate of Applied Science degree in Digital Media Technology. Those include:

- **Digital Animation:** three-dimensional computer graphic animation
- **Digital Graphics:** the creation, publication and management of digital graphics for online distribution
- **Digital Signage:** the design of digital content for digital media
- **Digital Storytelling:** the creation, implementation and distribution of digital storytelling
- **Digital Video:** video production techniques for digital media
- **Digital Video Game Animation:** video game design and development for entertainment
- **Digital Video Media Production:** the design and development of projects that combine narrative and music with digital imagery and sound

## Graduation Requirements

**Digital Media Certificates (all):** WorkKeys® scores of level 5 in Reading for Information, level 4 in Locating Information, and level 5 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Digital Media Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Digital Animation Certificate

<b>Core Curriculum Requirements</b> .....	<b>24</b>
CMT 142, Computer Illustration .....	3
CMT 145, Image Processing I.....	3
CMT 150, 2D Animation .....	3
CMT 160, Modeling and Animation .....	3
CMT 175, 3-D Character Design.....	3
CMT 227, Advanced Character Animation.....	3
CMT 290, Advanced 3D Animation Workshop A .....	3
CMT 291, Advanced 3D Animation Workshop B.....	3

**TOTAL CREDITS** .....24

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 142	3	CMT 150	3
	CMT 145	3	CMT 160	3
		6		6
2	CMT 175	3	CMT 290	3
	CMT 227	3	CMT 291	3
		6		6

## Digital Graphics Certificate

<b>Core Curriculum Requirements</b> .....	<b>24</b>
CMT 140, Print Media I.....	3
CMT 142, Computer Illustration .....	3
CMT 145, Image Processing I.....	3
CMT 180, Principles of Media Design .....	3
CMT 230, Web Design II.....	3
CMT 240, Print Media II.....	3
Approved CMT Electives.....	6

**TOTAL CREDITS** .....24

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 140	3	CMT 142	3
	CMT 145	3	CMT 240	3
		6		6
2	CMT 180	3	Elective	3
	CMT 230	3	Elective	3
		6		6

## Digital Signage Certificate

<b>Core Curriculum Requirements</b> .....	<b>24</b>
CMT 140, Print Media I.....	3
CMT 142, Computer Illustration .....	3
CMT 145, Image Processing I.....	3
CMT 180, Principles of Media Design .....	3
CMT 190, Digital Video Production I.....	3
CMT 195, Digital Video Editing I.....	3
ENGL 203G, Business & Professional Communication or ENGL 218G, Technical & Scientific Communication.....	3
OEGR 221, Cooperative Experience I.....	3
Approved electives.....	6

*Choose 2 courses from the following:*

CMT 148, Digital Signage Systems .....	3
CMT 191, Digital Content Integration.....	3
CMT 238, Digital Signage Content Mgmt.....	3
CMT 239, Digital Content Mgt. for Mobile Devices.....	3
CMT 293, Adv. Digital Signage Content Mgmt.....	3
Any approved CS course.....	3

**TOTAL CREDITS** .....30

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 140	3	CMT 142	3
	CMT 145	3	ENGL 203G or 218G	3
			Elective	3
		6		9

2	CMT 180	3	OEGR 221	3
	CMT 190	3	CMT 195	3
			Elective	3
		6		9

### Digital Storytelling Certificate

<b>Core Curriculum Requirements</b> .....	<b>27</b>
CMT 145, Image Processing I.....	3
CMT 190, Digital Video Production I.....	3
CMT 195, Digital Video Editing I.....	3
CMT 206, Sound Design.....	3
CMT 292, Creative Media Studio.....	3
CMT 295, Professional Portfolio Design/Development.....	3
ENGL 220G, Introduction to Creative Writing.....	3
Approved electives.....	6

**TOTAL CREDITS** .....27

#### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 145	3	CMT 206	3
	CMT 190	3	CMT 292	3
	CMT 195	3		
		9		6
2	ENGL 220G	3	CMT 295	3
	Approved elective	3	Approved elective	3
		6		6

### Digital Video Certificate

<b>Core Curriculum Requirements</b> .....	<b>24</b>
CMT 145, Image Processing I.....	3
CMT 170, History of Film: A Global Perspective.....	3
CMT 190, Digital Video Production I.....	3
CMT 195, Digital Video Editing I.....	3
CMT 205, Cinematography.....	3
CMT 210, Digital Video Production II.....	3
CMT 215, Digital Video Editing II.....	3
CMT 295, Professional Portfolio Design/Development.....	3

**TOTAL CREDITS** .....24

#### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 145	3	CMT 210	3
	CMT 170	3	CMT 215	3
		6		6
2	CMT 190	3	CMT 205	3
	CMT 195	3	CMT 295	3
		6		6

### Digital Video Game Animation Certificate

<b>Core Curriculum Requirements</b> .....	<b>33</b>
CMT 142, Computer Illustration.....	3
CMT 145, Image Processing I.....	3
CMT 150, 2D Animation.....	3
CMT 160, Modeling and Animation.....	3
CMT 175, 3-D Character Design.....	3
CMT 227, Advanced Character Animation.....	3
CMT 270, Digital Video Game Theory & Animation I.....	3
CMT 271, Digital Video Game Theory & Animation II.....	3
CMT 280, Interactive Design.....	3
CMT 290, Advanced 3D Animation Workshop A.....	3
CMT 291, Advanced 3D Animation Workshop B.....	3

**TOTAL CREDITS** .....33

#### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 142	3	CMT 150	3
	CMT 145	3	CMT 160	3
			CMT 270	3
		6		9
2	CMT 175	3	CMT 280	3
	CMT 227	3	CMT 290	3
	CMT 271	3	CMT 291	3
		9		9

### Digital Video Media Production Certificate

<b>Core Curriculum Requirements</b> .....	<b>33</b>
CMT 126, Film Crew Training.....	9
CMT 145, Image Processing I.....	3
CMT 170, History of Film: A Global Perspective.....	3
CMT 190, Digital Video Production I.....	3
CMT 195, Digital Video Editing I.....	3
CMT 205, Cinematography.....	3
CMT 210, Digital Video Production II.....	3
CMT 215, Digital Video Editing II.....	3
CMT 295, Professional Portfolio Design/Development.....	3

**TOTAL CREDITS** .....33

#### Roadmap

*Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	CMT 145	3	CMT 190	3
	CMT 170	3	CMT 195	3
		6		6
2	CMT 126	9	CMT 205	3
	CMT 210	3	CMT 295	3
	CMT 215	3		
		15		6



## Associate of Applied Science in Digital Media Technology

**Branch Requirement .....3**  
 COLL 101, College/Life Success.....3

**Common Core & Related Requirements ..... 34**  
 ART 101G, Orientation in Art .....3  
 ART 150, Drawing I.....3  
 ART 155, 2-D Fundamentals.....3  
 BUSA 111, Business in a Global Society.....3  
 COMM 265G, Principles of Human Communication.....3  
 ENGL 111G, Rhetoric & Composition .....4  
 ENGL 116G, Perspectives on Film.....3  
 ENGL 235, Principles of Story Across the Media.....3  
 MATH 120, Intermediate Algebra or higher or  
     MATH 210G, Mathematics Appreciation .....3  
 PSY 201G, Introduction to Psychology .....3  
 OEGR 221, Coop Experience or Approved Elective.....3

**Program Option (Choose one).....30-33**  
*For electives, choose from ART, CMT, CMI, OCAN, OEGR, or OEPT.*

1. Digital Animation Certificate and 6 credits of electives
2. Digital Graphics Certificate and 6 credits of electives
3. Digital Signage Certificate
4. Digital Storytelling Certificate and 3 credits of electives
5. Digital Video Certificate and 6 credits of electives
6. Digital Video Game Animation Certificate
7. Digital Video Media Production Certificate

**TOTAL CREDITS .....67-70**

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

Yr.	Fall	Cr.	Spring	Cr.
1	COLL 101	3	ART 150	3
	ENGL 111G	4	ART 155	3
	ART 101G	3	PSY 201G	3
	Program option	6-9	Program option	6-9
		16-19		
2	ENGL 116G	3	ENGL 235	3
	MATH 120 or 210G	3	BUSA 111	3
	COMM 265G	3	OEGR 221 or elective	3
	Program option	6-9	Program option	6-9
				Var.

# Drafting and Graphics Technology

The **Drafting and Graphics Technology** program provides students with the education and experience for entry-level drafting positions with industrial companies, architectural firms, and government agencies. Students will learn how to develop working drawings and electronic simulations for architectural and related construction projects, basic construction and structural design, architectural rendering, architectural-aided drafting (CAD), layout and designs, architectural blueprint interpretation, and basic structural wiring diagramming.

## Graduation Requirements

**Certificate in Drafting and Graphics Technology:** WorkKeys® scores of level 4 in Reading for Information, level 4 in Locating Information, and level 4 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Drafting and Graphics Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Drafting and Graphics Technology: Architectural Drafting

<b>Technical Requirements.....</b>	<b>26</b>
DRFT 101, Intro to Drafting and Design Technologies .....	1
DRFT 108, Drafting Concepts/Descriptive Geometry.....	2
DRFT 109, Computer Drafting Fundamentals .....	3
DRFT 112, Drafting Concepts/Comp Draft Fund I.....	4
DRFT 113, Drafting Concepts/Comp Draft Fund II .....	4
DRFT 114, Intro to Solid Modeling.....	3
DRFT 130, General Building Codes .....	3
DRFT 160, Construction Take-offs & Estimating .....	3
DRFT 180, Residential Drafting .....	3
<b>TOTAL CREDITS .....</b>	<b>26</b>

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

Fall	Cr.	Spring	Cr.
DRFT 101	1	DRFT 108	2
DRFT 112	4	DRFT 113	4
DRFT 130	3	DRFT 160	3
DRFT 109	3	DRFT 180	3
		DRFT 114	3
	11		15

## Certificate in Drafting and Graphics Technology: General Drafting

<b>Technical Requirements.....</b>	<b>25</b>
DRFT 101, Intro to Drafting and Design Technologies .....	1
DRFT 108, Drafting Concepts/Descriptive Geometry.....	2
DRFT 109, Computer Drafting Fundamentals .....	3
DRFT 112, Drafting Concepts/Comp Draft Fund I.....	4
DRFT 130, General Building Codes .....	3

DRFT 151, Construction Principles and Print Reading.....	3
DRFT 160, Construction Take-offs & Estimating .....	3
DRFT 176, Computer Drafting in 3D.....	3
DRFT 180, Residential Drafting .....	3

**TOTAL CREDITS .....** **25**

Fall	Cr.	Spring	Cr.
DRFT 101	1	DRFT 151	3
DRFT 108	2	DRFT 109	3
DRFT 112	4	DRFT 160	3
DRFT 130	3	DRFT 180	3
DRFT 176	3		
	13		12

## Associate of Applied Science in Drafting and Graphics Technology

<b>Branch Requirement .....</b>	<b>3</b>
COLL 101, College/Life Success.....	3

<b>Common Core Requirements.....</b>	<b>13</b>
COMM 253G, Public Speaking or	
COMM 265G, Princ. of Human Communication .....	3
ENGL 111G, Rhetoric & Composition .....	4
ENGL 203G, Business & Professional Communication or	
ENGL 218G, Technical & Scientific Communication.....	3
PSY 201G, Introduction to Psychology or	
SOC 101G, Introductory Sociology.....	3

<b>Core Curriculum Requirements .....</b>	<b>33</b>
DRFT 112, Drafting Concepts/Comp Draft Fund I.....	4
DRFT 113, Drafting Concepts/Comp Draft Fund II .....	4
DRFT 118, Geometry for Drafting .....	3
DRFT 130, General Building Codes .....	3
DRFT 143, Civil Drafting Fundamentals.....	3
DRFT 176, Solid Modeling, Rendering and Animation.....	3
DRFT 177, Computer Rendering and Animation I.....	3
DRFT 180, Residential Drafting .....	3
DRFT 181, Commercial Drafting.....	3
DRFT 288, Portfolio Development .....	4

<b>Program Options (Choose One) .....</b>	<b>15</b>
<b>Architectural Technology.....</b>	<b>15</b>
DRFT 160, Construction Take-Offs & Estimating .....	3
DRFT 230, Building Systems Drafting.....	3
DRFT 240, Structural Systems Drafting.....	4
DRFT 270, Architectural Sketching/Rendering.....	3
Approved DRFT Elective .....	2

<b>General Drafting .....</b>	<b>15</b>
DRFT 151, Construction Principles and Print Reading.....	3
DRFT 276, Computer Rendering & Animation I.....	3
DRFT 277, Computer Rendering & Animation II.....	3
Approved DRFT Elective .....	6

**TOTAL CREDITS .....** **64**

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

### Architectural Drafting

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
DRFT 112	4	DRFT 113	4
DRFT 130	3	DRFT 160	3
DRFT elective	2	DRFT 177	3
ENGL 111G	4	ENGL 203G or 218G	3
COLL 101	3	PSY 201G or SOC 101G	3
	16		16

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
DRFT 118	3	DRFT 176	3
DRFT 143	3	DRFT 240	4
DRFT 180	4	DRFT 270	3
DRFT 230	3	DRFT 280	4
COMM 253G or 265G	3	DRFT 220	4
	16		18

### General Drafting

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
DRFT 112	4	DRFT 113	
DRFT 130	3	DRFT 177	
DRFT elective	2	DRFT 276	
ENGL 111G	4	ENGL 203G or 218G	3
COLL 101	3	PSY 201G or SOC 101G	3
	16		

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
DRFT 118	3	DRFT 151	4
DRFT 143	3	DRFT 176	3
DRFT 180	4	DRFT 220	4
DRFT 277	3	DRFT 288	4
COMM 253G or 265G	3	Elective	2
	16		17

# Education

The **Associate Degree in Education** prepares students for work as a teacher's aide, substitute teacher or other paraprofessional in elementary or secondary schools. The curriculum is designed for maximum transfer of credits to the Teacher Education Program (TEP) at NMSU for those students planning to complete the Bachelor's Degree in Education. Note: Completion of the Associate degree in Education does not guarantee admission into the TEP.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

### Associate Degree in Education

**Branch Requirement** ..... 3  
 COLL 101, College/Life Success.....3

**Common Core & Related Requirements**.....46

**Area I: English & Communication** .....10  
 ENGL 111G, Rhetoric & Composition .....4  
 ENGL 211G, Writing in Humanities/Soc. Sciences .....3  
 COMM 253G, Public Speaking or  
 COMM 265G, Principles of Human Communication .....3

**Area II: Mathematics** .....6  
 Elementary Education majors:  
 MATH 111, Fund. of Elementary Math I .....3  
 MATH 112G, Fund. of Elementary Math II .....3

Secondary Education majors:  
 MATH 120, Intermediate Algebra.....3  
 MATH 210G, Mathematics Appreciation .....3

**Area III: Laboratory Sciences** .....12  
*Select 3 courses from 3 different areas. Must include lab.*

ASTR 105G, The Planets or  
 ASTR 110G, Introduction to Astronomy.....4  
 BIOL 101G, Human Biology or  
 BIOL 111G/GL, Natural History of Life or  
 BIOL 211G/GL, Cellular & Organismal Biology .....4  
 CHEM 110G, Principles/Applications of Chemistry or  
 CHEM 111G, General Chemistry I.....4  
 ES 110G, Introductory Environmental Science .....4  
 GEOG 111G, Geography of Natural Environment.....4  
 GEOL 111G, Survey of Geology or  
 GEOL 212G, The Dynamic Earth.....4  
 PHYS 110G, The Great Ideas of Physics or  
 PHYS 211G/GL, General Physics I and Lab.....4

**Area IV: Social & Behavioral Sciences** .....6  
*Select 2 classes from 2 different areas.*

ANTH 201G, Introduction to Anthropology.....3  
 ECON 201G, Introduction to Economics or  
 ECON 251G, Principles of Macroeconomics or  
 ECON 252G, Principles of Microeconomics.....3

GEOG 112G, World Regional Geography or  
 GEOG 120G, Culture & Environment.....3  
 GOVT 100G, American National Government or  
 GOVT 110G, Introduction to Political Science .....3  
 SOC 101G, Introductory Sociology .....3

**Area V: Humanities & Fine Arts** .....12  
 HIST 101G, Roots of Modern Europe or  
 HIST 102G, Modern Europe .....3  
 HIST 201G, Intro to Early American History or  
 HIST 202G, Intro to Recent American History.....3  
 ART 101G, Orientation in Art or  
 MUS 101G, Introduction to Music or  
 THTR 101G, Introduction to Theatre.....3  
 Fine Arts elective (any ART/MUS/THTR course).....3

**Professional Education Courses** .....10  
*Cumulative GPA of 2.5 and a "C" or better required in these courses. CEP, EDUC & ELA courses taken more than 7 years prior to graduation must be repeated.*

CEP 110G, Human Growth & Behavior .....3  
 CEP 210, Educational Psychology .....3  
 EDUC 181, Field Experience I.....1  
 ELA 101, Freshman Orientation .....1  
 ELA 250, Introduction to Education.....2

**Electives** .....6  
*Suggested courses: HIST 261, MATH 215, SPAN 111, SPAN 112*

**TOTAL CREDITS** .....65

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	ENGL 211G	3
ENGL 111G	4	ART/MUS/THTR 101G	3
CEP 110G	3	CEP 210	3
ELA 101	1	Area III	4
Area IV	3	Area IV	3
	14		16

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
COMM 253G or 265G	3	ELA 250	2
HIST 101G or 102G	3	EDUC 181	1
Area II	3	HIST 201G or 202G	3
Area III	4	Area II	3
Fine Arts elective	3	Area III	4
Elective	3	Elective	3
	18		16

# Early Childhood Education

The **Early Childhood Education** program prepares students to become highly qualified teachers, assistant teachers, family daycare providers, or administrators of early education programs for children ages birth through age eight. Students will gain a broad understanding of the specific needs of young children and develop strategies for meeting those needs.

Students who complete the Early Childhood Administrative Certificate are eligible to apply for an early childhood administrative specialist certificate with the New Mexico Office of Child Development; the permanent certificate is granted upon completion the Associate Degree in Early Childhood Education.

The Associate Degree in Early Childhood Education includes lower-division courses required for entry into the Teacher Education Program (TEP) at NMSU Las Cruces. Please note that students are required to pass a security background check to take practicum courses. Past criminal violations may prevent a student from completing the degree and from being hired by school systems or other child care facilities upon graduation.

## Graduation Requirements

Early Childhood Administrative Certificate: WorkKeys® scores of level 4 in Reading for Information, level 4 in Locating Information, and level 4 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

Associate Degree in Early Childhood Education: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Early Childhood Administrative Certificate

<b>Core Courses.....</b>	<b>11</b>
ECED 115, Child Growth, Development & Learning.....	3
ECED 125, Health, Safety & Nutrition.....	2
ECED 135, Family & Community Collaboration.....	3
ECED 255, Assessment of Young Children & Program Eval.....	3

<b>Administrative Courses.....</b>	<b>13</b>
ECED 270, Program Management .....	3
ECED 275, Curriculum for Diverse Learners & Families .....	3
ECED 276, Effective Program Dev. for Diverse Learners.....	2
ECED 280, Professional Relationships.....	3
ECED 281, Professional Relationships Practicum .....	2

**TOTAL CREDITS .....**24

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ECED 115	3	ECED 125	2
ECED 255	3	ECED 235	3

ECED 275	3	ECED 270	3
	9		8

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ECED 276	2	Not applicable	
ECED 280	3		
ECED 281	2		
	7		

## Associate Degree in Early Childhood Education

**Branch Requirement .....**3  
 COLL 101, College Life/Success..... 3

**Common Core Requirements.....** 33

Area I: English & Communications ..... 10  
 ENGL 111G, Rhetoric & Composition ..... 4  
 ENGL 211G, Writing in the Humanities & Soc. Sciences ..... 3  
 COMM 253G, Public Speaking or  
 COMM 265G, Principles of Human Communication ..... 3

Area II: Mathematics ..... 6  
 MATH 111, Fundamentals of Elementary Math I..... 3  
 MATH 112G, Fundamentals of Elementary Math II..... 3

Area III: Laboratory Science..... 8  
*Complete 2 courses from two different areas.*

ASTR 105G, The Planets or  
 ASTR 110G, Intro to Astronomy..... 4  
 BIOL 101G, Human Biology or  
 BIOL 111G/GL, Natural History of Life or  
 BIOL 211G/GL, Cellular & Organismal Biology..... 4  
 CHEM 110G, Principals & Applications of Chemistry or  
 CHEM 111G, General Chemistry I or  
 CHEM 112G, General Chemistry II..... 4  
 ES 110G, Introductory Environmental Science ..... 4  
 GEOG 111G, Geography of Natural Environment..... 4  
 GEOL 111G, Survey of Geology or  
 GEOL 212G, The Dynamic Earth..... 4  
 PHYS 110G, Great Ideas of Physics or  
 PHYS 211G/GL, General Physics I and Lab ..... 4

Area IV: Social/Behavioral Sciences..... 3  
 Complete 1 course from:

ANTH 201G, Intro to Anthropology ..... 3  
 ECON 201G, Introduction to Economics or  
 ECON 251G, Principles of Macroeconomics or  
 ECON 252G, Principles of Microeconomics ..... 3  
 GEOG 112G, World Regional Geography or  
 GEOG 120G, Culture and Environment..... 3  
 GOVT 100G, American National Government  
 GOVT 110G, Intro to Political Science..... 3  
 SOC 101G, Intro to Sociology..... 3

Area V: Humanities/Fine Arts .....9  
 HIST 101G, Roots of Modern Europe or  
   HIST 102G, Modern Europe .....3  
 HIST 201G, Early American History or  
   HIST 202G, Recent American History.....3  
 ART 101G, Orientation in Art or  
   MUS 101G, Introduction to Music or  
   THTR 101G, Introduction to Theatre.....3

**Professional Education Courses .....32**

*Cumulative GPA of 2.5 and a "C" or better required in these courses. CEP and ECED courses taken more than 7 years prior to graduation must be repeated.*

CEP 110G, Human Growth & Behavior .....3  
 ECED 115, Child Growth, Development & Learning .....3  
 ECED 125, Health, Safety & Nutrition.....2  
 ECED 135, Family & Community Collaboration.....3  
 ECED 215, Curriculum Dev. & Implementation I .....3  
 ECED 220, Practicum I .....2  
 ECED 225, Curriculum Dev & Implementation II .....3  
 ECED 230, Practicum II.....2  
 ECED 235, Intro to Language, Literacy and Reading .....3  
 ECED 245, Professionalism .....2  
 ECED 255, Assessment of Young Children & Program Eval.....3  
 ECED 265, Guiding Young Children .....3

**TOTAL CREDITS .....71**

**Roadmap**

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ECED 115	3	ECED 125	2
ECED 255	3	ECED 235	3
COLL 101	3	CEP 110G	3
ENGL 111G	4	ENGL 211G	3
COMM 253G or 265	3	Area IV	3
		HIST 101G or 102G	3
	16		17
		Summer	Cr.
		ECED 135	3
		ECED 245	2
		ECED 265	3
			8

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ECED 215	3	ECED 225	3
ECED 220	2	ECED 230	2
MATH 111	3	MATH 112G	3
Area III	4	Area III	4
HIST 201G or 202G	3	ART/MUS/THTR 101G	3
	15		15

# Emergency Medical Technician

The **Emergency Medical Technician** program prepares students for employment as Emergency Medical Technicians (EMT) in fire departments, private ambulance services, and hospital-based systems. The curriculum focuses on study anatomy and physiology, the pathophysiology of diseases, traumatic injuries, pharmacology, and cardiac care. Students will develop their knowledge and skill through both laboratory and clinical field experiences.

## Graduation Requirements

Certificate in Emergency Medical Technician – Basic, Intermediate, and Paramedic: WorkKeys® scores of level 5 in Reading for Information, level 5 in Locating Information, and level 4 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

AAS in Emergency Medical Services: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Program Entrance Requirements

For all EMT programs, students must be able to lift at least 120 pounds and work in adverse weather conditions.

- EMT Basic: No pre-requisites
- EMT Intermediate
  - Successful completion of EMT Basic coursework
  - TB skin test done within the last year
  - EMT-Basic license in hand by the end of the sixth week of EMT-Intermediate classes
- EMT Paramedic
  - EMT Basic or EMT Intermediate license
  - Written, oral, and practical assessment at the EMT Basic or EMT Intermediate level depending on current licensure
  - HOBET exam
  - Copy of current health care provider CPR card
  - Completed departmental application including resume, letter of intent, and recommendation letters
  - TB skin test done within the last year

## Certificate in Emergency Medical Technician Basic

**General Education and Common Core Requirements..... 10**  
 ENGL 111G, Rhetoric & Composition ..... 4  
 BOT/NURS 150, Medical Terminology ..... 3  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication ..... 3

**Program Requirements ..... 10**  
*Courses must be taken concurrently. OEEM 120, 120L and 121 must be completed with a C or higher.*

OEEM 101, CPR for the Health Care Provider ..... 1  
 OEEM 120, EMT Basic ..... 6  
 OEEM 120L, EMT Basic Lab ..... 2  
 OEEM 121, EMT Basic Field/Clinical ..... 1

**TOTAL CREDITS .....20**

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ENGL 111G	4	OEEM 101	1
BOT/NURS 150	3	OEEM 120	6
COMM 253G or 265G	3	OEEM 120L	2
		OEEM 121	1
	10		10

## Certificate in Emergency Medical Technician Intermediate

All courses must be completed with a C or higher.

**General Education and Common Core Requirements..... 21**

ENGL 111G, Rhetoric & Composition ..... 4  
 BOT/NURS 150, Medical Terminology ..... 3  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication ..... 3  
 MATH 120, Intermediate Algebra..... 3  
 BIOL 225, Human Anatomy and Physiology I..... 4  
 BIOL 226, Human Anatomy and Physiology II ..... 4

**Program Requirements ..... 9**

*Students must enroll in these courses concurrently and score at least 80% on all departmental exams.*

OEEM 150, EMT Intermediate..... 5  
 OEEM 150L, EMT Intermediate Lab ..... 2  
 OEEM 151, EMT Intermediate Field/Clinical ..... 2

**TOTAL CREDITS .....30**

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ENGL 111G	4	COMM 253G or 265G	3
BOT/NURS 150	3	MATH 120	3
BIOL 225	4	BIOL 226	4
	11		10

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OEEM 150	5	Not applicable	
OEEM 150L	2		
OEEM 151	2		
	9		

## Certificate in Emergency Medical Technician Paramedic

All courses must be completed with a C or higher

**Supplemental Requirements .....9-15**  
*Complete as needed according to program director*

OEEM 150, EMT Intermediate.....	5
OEEM 150L, EMT Intermediate Lab.....	2
OEEM 151, EMT Intermediate Field/Clinical.....	2
OEEM 235, EMT Paramedic Clinical Experience III.....	1-3
OEEM 245, EMT Paramedic Field Internship III.....	1-3

**Program Requirements ..... 47**

OEEM 201, Human Pathophysiology.....	3
OEEM 202, EMT Paramedic Respiratory Emergencies.....	3
OEEM 203, EMT Paramedic Trauma Emergencies.....	3
OEEM 206, Intro to Advanced Prehospital Care.....	3
OEEM 207, Introduction to Pharmacology.....	3
OEEM 210, Cardiac Rhythm Interpretation.....	3
OEEM 212, EMT Paramedic IV Cardiovascular Emerg.....	3
OEEM 213, EMT Paramedic Med. I Emergencies I.....	3
OEEM 214, EMT Paramedic Med. Environmental Emer. II.....	3
OEEM 216, EMT Paramedic Reproductive/Childhood Emer.....	3
OEEM 230, EMT Paramedic Clinical Experience I.....	3
OEEM 231, EMT Paramedic Clinical Experience II.....	3
OEEM 240, EMT Paramedic Field Experience I.....	3
OEEM 241, EMT Paramedic Field Experience II.....	3
OEEM 242, EMT Paramedic Field Internship II.....	3
OEEM 243, EMT Paramedic Preparation for Practice.....	2

**TOTAL CREDITS ..... 47-62**

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
OEEM 150	5	OEEM 201	3
OEEM 150L	2	OEEM 202	3
OEEM 151	2	OEEM 207	3
	9		9

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OEEM 203	3	OEEM 235 if needed	(Var.)
OEEM 210	3	OEEM 245 if needed	(Var.)
OEEM 216	3	OEEM 230	3
		OEEM 240	3
	9		6-12

3<sup>rd</sup> year

Fall	Cr.	Spring	Cr.
OEEM 212	3	OEEM 213	3
OEEM 231	3	OEEM 241	3
OEEM 242	3	OEEM 242	3
	9		

4<sup>th</sup> year

Fall	Cr.	Spring	Cr.
OEEM 214	3	Not applicable	
OEEM 243	2		
	5		

## Associate of Applied Science in Emergency Medical Technician Paramedic

All courses must be completed with a C or higher

**Branch Requirement .....3**  
 COLL 101, College Life/Success.....3

**General Education and Common Core Requirements.....27**

ENGL 111G, Rhetoric & Composition.....	4
ENGL 203G, Business & Professional Communication or ENGL 218G, Technical & Scientific Communication.....	3
BOT/NURS 150, Medical Terminology.....	3
COMM 253G, Public Speaking or COMM 265G, Princ. of Human Communication.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3
BIOL 225, Human Anatomy and Physiology I.....	4
BIOL 226, Human Anatomy and Physiology II.....	4
MATH 120, Intermediate Algebra.....	3

**Supplemental Requirements .....9-15**  
*Complete as needed according to program director.*

OEEM 150, EMT Intermediate.....	5
OEEM 150L, EMT Intermediate Lab.....	2
OEEM 151, EMT Intermediate Field/Clinical.....	2
OEEM 235, EMT Paramedic Clinical Experience III.....	1-3
OEEM 245, EMT Paramedic Field Internship III.....	1-3

**Program Requirements ..... 47**

OEEM 201, Human Pathophysiology.....	3
OEEM 202, EMT Paramedic Respiratory Emergencies.....	3
OEEM 203, EMT Paramedic Trauma Emergencies.....	3
OEEM 206, Intro to Advanced Prehospital Care.....	3
OEEM 207, Introduction to Pharmacology.....	3
OEEM 210, Cardiac Rhythm Interpretation.....	3
OEEM 212, EMT Paramedic IV Cardiovascular Emerg.....	3
OEEM 213, EMT Paramedic Med. I Emergencies I.....	3
OEEM 214, EMT Paramedic Med. Environmental Emer. II.....	3
OEEM 216, EMT Paramedic Reproductive/Childhood Emer.....	3
OEEM 230, EMT Paramedic Clinical Experience I.....	3
OEEM 231, EMT Paramedic Clinical Experience II.....	3
OEEM 240, EMT Paramedic Field Experience I.....	3
OEEM 241, EMT Paramedic Field Experience II.....	3
OEEM 242, EMT Paramedic Field Internship II.....	3
OEEM 243, EMT Paramedic Preparation for Practice.....	2

**TOTAL CREDITS ..... 77-92**

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*



1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ENGL 111G	4	COMM 253G or 265G	3
BOT/NURS 150	3	MATH 120	3
BIOL 225	4	BIOL 226	4
	11		10

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
OEEM 150	5	OEEM 201	3
OEEM 150L	2	OEEM 202	3
OEEM 151	2	OEEM 207	3
	9		9

3<sup>rd</sup> year

Fall	Cr.	Spring	Cr.
OEEM 203	3	OEEM 235 if needed	(Var.)
OEEM 210	3	OEEM 245 if needed	(Var.)
OEEM 216	3	OEEM 230	3
		OEEM 240	3
	9		6-12

4<sup>th</sup> year

Fall	Cr.	Spring	Cr.
OEEM 212	3	OEEM 213	3
OEEM 231	3	OEEM 241	3
OEEM 242	3	OEEM 242	3
	9		

5<sup>th</sup> year

Fall	Cr.	Spring	Cr.
OEEM 214	3	Not applicable	
OEEM 243	2		
	5		

# Electrical Trades and Electronics Technology

The **Electrical Trades** and **Electronic Technology** programs prepare students for entry-level employment as electronic technicians or electrical tradesmen in a wide range of industries, including consumer electronics, industrial controls, avionics, manufacturing, construction, and computers.

The Electrical Trades certificate is designed for students who intend to enter the industrial workforce as maintenance persons, linemen, or building construction workers. Students will learn electricity theory, AC/DC circuits, maintenance and safety operation of industrial equipment, the use and care of common measuring instrumentation, and National Electric Code branch circuits.

The AAS in Electronics Technology curriculum emphasizes how to fabricate, operate, test, troubleshoot and maintain existing electronic equipment and systems. Graduates will be prepared to work with hardware and gain basic knowledge of software.

## Graduation Requirements

**Certificate in Electrical Trades:** WorkKeys® scores of level 3 in Reading for Information, level 4 in Locating Information, and level 3 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Electronics Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Electrical Trades

<b>Core Curriculum Requirements</b> .....	<b>30</b>
HVAC 102, Fundamentals of Electricity.....	4
HVAC 103, Electrical and Mechanical Controls I.....	4
MAT 110, Machine Operation & Safety.....	3
MAT 102, Print Reading for Industry.....	3
MAT 130, Applied Industrial Electricity I.....	4
OEET 115, Wiring Methods and Materials.....	5
OEET 205, National Electric Code.....	3
OEMN 210, Electrical Systems Troubleshooting/Repair.....	4
<b>TOTAL CREDITS</b> .....	<b>30</b>

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
HVAC 102	4	HVAC 103	4
OEET 115	5	OEET 205	3
MAT 110	3	OEMN 210	4
MAT 130	3	MAT 102	3
	15		14

## Associate of Applied Science in Electronics Technology

*A grade of "C" or better is required in all English, ET, math and science courses. Students who place out of MATH 120 must complete three credits of electives.*

<b>Branch Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success.....	3

<b>Common Core Requirements</b> .....	<b>24</b>
ENGL 111G, Rhetoric & Composition.....	4
ENGL 218G, Technical & Scientific Communication.....	3
COMM 265G, Principles of Human Communication or COMM 253G, Public Speaking.....	3
MATH 120, Intermediate Algebra.....	3
MATH 121G, College Algebra.....	3
PHYS 211G/GL, General Physics I/Lab.....	4
PHYS 212G/GL, General Physics II/Lab.....	4
<b>Core Curriculum Requirements</b> .....	<b>44</b>
E T 104, Soldering Techniques.....	1
E T 120, Computation & Presentation Software.....	3
E T 153, Introduction to Computer Networks.....	3
E T 182, Digital Logic.....	3
E T 183/L, Applied DC Circuits/Lab.....	3
E T 184/L, Applied AC Circuits/Lab.....	3
E T 246, Electronic Devices I.....	4
E T 262, Software Technology I.....	3
E T 272, Electronic Devices II.....	4
E T 273, Fundamentals of Networking Communications I.....	3
E T 276, Electronic Communications.....	4
E T 282, Digital Electronics.....	4
E T 283, Hardware PC Maintenance.....	3
E T 284, Software PC Maintenance.....	3
<b>TOTAL CREDITS</b> .....	<b>71</b>

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ET 120	3	ET 104	1
ET 183 & lab	3	ET 184 & lab	3
MATH 120	3	ET 282	4
ENGL 111G	4	ET 283	3
COLL 101	3	ET 182	3
		MATH 121G	3
	16		17
		Summer	Cr.
		COMM 253G or 265G	3
		ENGL 218G	3
			6

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ET 153	3	ET 272	4
ET 246	4	ET 276	4
ET 262	3	ET 284	3
ET 273	3	PHYS 212G & Lab	4
PHYS 211 & Lab	4		
	17		15

# Engineering

The **Associate of Science in Engineering** degree prepares the graduate for an entry-level position in the engineering industry. Students may apply the associates degree coursework to a Bachelor of Science Degree in Engineering in one of several fields including Chemical Engineering, Civil Engineering, Electrical & Computer Engineering, Engineering Physics, Engineering Technology & Surveying Engineering, Industrial Engineering, or Mechanical & Aerospace Engineering offered at one of the New Mexico four-year institutions.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Science in Engineering

All courses must be completed with a C or higher.

### Branch Requirement ..... 3

COLL 101, College/Life Success.....3

### Common Core & Related Requirements ..... 41

#### Area I: English & Communication ..... 10

ENGL 111G, Rhetoric & Composition .....4

ENGL 218G, Technical & Scientific Communication .....3

COMM 253G, Public Speaking or

COMM 265G, Principles of Human Communication .....3

#### Area II: Mathematics ..... 8

MATH 191G, Calculus & Analytic Geometry I.....4

MATH 192G, Calculus & Analytic Geometry II .....4

#### Area III: Laboratory Sciences ..... 8

CHEM 111G, General Chemistry I.....4

PHYS 215G+GL, Engineering Physics I & Lab .....4

#### Area IV: Social/Behavioral Science ..... 9

ECON 251G, Principles of Macroeconomics.....3

Social/Behavioral Science electives.....6

Complete 2 “G” courses from ANTH, GOVT, PSY, or SOC

#### Area V: Humanities/Fine Arts ..... 6

Complete 2-3 Humanities/Fine Arts “G” courses from ART, HIST,

ENGL (must be ENGL 244G if selected), MUS, or THTR

### Related Requirements ..... 8

Complete 2 classes from:

CHEM 112G, General Chemistry II.....4

GEOL 111G, Survey of Geology .....4

PHYS 216G & GL, Engineering Physics II & lab .....4

Other approved laboratory science .....4

### Engineering Core Requirements ..... 15

Complete 9 credits from Group I and 6 credits from Group II

#### Group I.....9

ENGR 100, Introduction to Engineering.....3

DRFT 109, Computer Drafting Fundamentals or

DRFT 114, Intro to Mech. Drafting/Solid Modeling.....3

ENGR 111, Matlab Programming.....3

#### Group II (choose 2 courses from below)..... 6-8

CE 151, Intro to Civil Engineering or

GEN 151, Intro to Geologic Engineering .....3

CE 233, Mechanics-Statics .....3

EE 161, Computer Aided Problem Solving.....4

EE 260, Embedded Systems.....4

EE 280, DC and AC Circuits .....4

MATH 291G, Calculus and Analytic Geometry III .....3

**TOTAL CREDITS .....67-69**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

### 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	ENGL 111G	4
ENGR 100	3	EE 161	4
MATH 191G	4	MATH 192G	4
CHEM 111G	4	CHEM 112G	4
Area IV	3		
	17		16
		Summer	Cr.
		ECON 251G	3
			3

### 2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ENGR 111	3	DRFT 109 or 114	3
COMM 253G or 265G	3	EE 280	4
ENGL 218G	3	Area IV	3
PHYS 215G/GL	4	PHYS 216G/GL	4
Area V	3	Area V	3
	16		17

# Facilities Maintenance Technology

The **Facilities Maintenance Technology** program equips students with the technical and management skills necessary to maintain, repair, troubleshoot, and manage modern maintenance programs in industrial plants, warehouses, hospitals, schools, and government buildings. Two options are available: Facilities Maintenance and Industrial maintenance.

## Graduation Requirements

Certificate in Facilities Maintenance Technology: WorkKeys® scores of level 4 in Reading for Information, level 4 in Locating Information, and level 3 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

AAS in Facilities and Maintenance Technology: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Facilities Maintenance Technology

<b>Core Curriculum requirements</b> .....	<b>19</b>
OEMN 105, Intro to Building Trades & Maintenance .....	4
OEMN 110, Small Equipment Maintenance & Repair .....	4
OEMN 209, Basic Electricity for Maintenance .....	3
OEMN 210, Electrical Systems Troubleshooting/Repair .....	4
OEMN 230, Facilities Maintenance Management .....	4

### Program Options (choose one) .....

#### Facilities Maintenance Option

OEMN 100, Interior Building Maintenance .....	4
OEMN 120, Painting & Finishing Techniques .....	4
OEMN 130, Carpentry Repair Techniques .....	4

#### Industrial Maintenance Option

OEMN 111, Basic Hydraulics .....	3
OEMN 112, Basic Pneumatics .....	3
OEMN 115, Blueprint Reading .....	3
OEMN 116, Basic Machining .....	3

### **TOTAL CREDITS** .....

#### **Roadmap**

*Additional classes may be needed based on placement test results and/or course prerequisites. Please contact the MSDP Department Chair for help with creating a customized plan.*

## Associate of Applied Science in Facilities Maintenance Technology

<b>Branch Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success .....	3

### **Common Core & Related Requirements** .....

ENGL 111G, Rhetoric & Composition .....	4
ENGL 218G, Technical & Scientific Communication .....	3
COMM 253G, Public Speaking or	
COMM 265G, Principles of Human Communication .....	3

BCIS 110, Intro to Computerized Info Systems .....	3
PSY 201G, Introduction to Psychology or	
SOC 101G, Introductory Sociology .....	3

### **Technical Requirements** .....

HVAC 101, Fundamentals of Refrigeration .....	4
HVAC 118, Tech Math for HACR Technicians .....	3
OEMN 105, Intro to Building Trades & Maintenance .....	4
OEMN 110, Small Equipment Maintenance & Repair .....	4
OEMN 209, Basic Electricity for Maintenance .....	3
OEMN 210, Electrical Systems Troubleshooting/Repair .....	4
OEMN 230, Facilities Maintenance Management .....	4
WELD 101, Fundamentals of Welding .....	3

### **Program options (choose one)** .....

#### Facilities Maintenance Option

OEMN 100, Interior Building Maintenance .....	4
OEMN 120, Painting & Finishing Techniques .....	4
OEMN 130, Carpentry Repair Techniques .....	4
OEMN 200, Exterior Building Maintenance .....	4
OEMN 220, Plumbing/Climate System Maintenance .....	4
OEMN 260, Landscape Management/ Maintenance I .....	3

#### Industrial Maintenance Option

OEMN 111, Basic Hydraulics .....	3
OEMN 112, Basic Pneumatics .....	3
OEMN 115, Blueprint Reading .....	3
OEMN 116, Basic Machining .....	3
OEMN 250, Mechanical Maintenance I .....	3
OEMN 251, Mechanical Maintenance II .....	3
OEMN 252, Alignment .....	3
Approved elective .....	2

### **TOTAL CREDITS** .....

#### **Roadmap**

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*



# Fire Science

The **Associate of Applied Science (AAS) degree in Fire Science** curriculum equips students with the knowledge base necessary for entry-level firefighters and includes a course equivalent to the Academy's "Firefighter I." Courses completed through the Certificate in Fire Science apply to the associate degree.

## Graduation Requirements

**Certificate in Fire Science:** WorkKeys® scores of level 5 in Reading for Information, level 5 in Locating Information, and level 4 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Fire Science:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Fire Science

<b>Core Curriculum Requirements</b> .....	<b>26</b>
FIRE 114, Fire Behavior and Combustion .....	3
FIRE 126, Fire Prevention.....	3
FIRE 127, Rescue Operations.....	3
FIRE 128, Apparatus and Equipment .....	3
FIRE 200, Special Topics: Live Burn Laboratory .....	2
FIRE 203, Fire & Emergency Services Administration.....	3
FIRE 210, Building Construction for Fire Prevention.....	3
FIRE 223, Fire Investigations I.....	3
FIRE 224, Strategy and Tactics .....	3
<b>Electives (Complete 2 from list)</b> .....	<b>6</b>
FIRE 112, Principles of Emergency Services .....	3
FIRE 202, Wildland Fire Control I .....	3
FIRE 222, Aircraft Fire Control .....	3
FIRE 225, Fire Protection Systems .....	3
FIRE 230, Fire Service Instructor .....	3
ET 297, Emergency Response to Haz. Mat. Incidents .....	3
<b>TOTAL CREDITS</b> .....	<b>32</b>

## Roadmap

Visit with an advisor for help with creating a customized plan.

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
FIRE 114	3	FIRE 127	3
FIRE 126	3	FIRE 200	2
FIRE 128	3	FIRE 203	3
	9		8

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
FIRE 210	3	FIRE 224	3
FIRE 223	3	Elective	3
Elective	3		
	9		6

## Associate of Applied Science in Fire Science

<b>General Course Requirements</b> .....	<b>20</b>
ENGL 111G, Rhetoric & Composition .....	4

ENGL 218G, Technical & Scientific Communication.....	3
CHEM 110G, Principles and Appl. of Chemistry or CHEM 111G, General Chemistry I .....	4
MATH 120, Intermediate Algebra.....	3
MGT 201, Introduction to Management.....	3
SOC 101G, Introductory Sociology or SOC 201G, Contemporary Social Problems.....	3

<b>Core Curriculum Requirements</b> .....	<b>26</b>
FIRE 114, Fire Behavior and Combustion .....	3
FIRE 126, Fire Prevention.....	3
FIRE 127, Rescue Operations.....	3
FIRE 128, Apparatus and Equipment .....	3
FIRE 200, Special Topics: Live Burn Laboratory .....	2
FIRE 203, Fire & Emergency Services Administration.....	3
FIRE 210, Building Construction for Fire Prevention.....	3
FIRE 223, Fire Investigations I.....	3
FIRE 224, Strategy and Tactics .....	3

<b>Fire Science Electives (Complete 3 from list)</b> .....	<b>9</b>
FIRE 112, Principles of Emergency Services .....	3
FIRE 202, Wildland Fire Control I .....	3
FIRE 222, Aircraft Fire Control .....	3
FIRE 225, Fire Protection Systems .....	3
FIRE 230, Fire Service Instructor .....	3
ET 297, Emergency Response to Haz. Mat. Incidents .....	3

<b>Electives (Complete 3 from list)</b> .....	<b>8</b>
BCS 110, CS 110, BLAW 230, CEP 110G, CJ (any), COMM 265G, ET 115, ET 121, ET 215, ET 225, ET 275, ET 298, GOVT 100G, GOVT 150G, HIST 202G, HIST 261, BOT/NURS 150, PSY 201G	

<b>TOTAL CREDITS</b> .....	<b>66</b>
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## Roadmap

Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	MATH 120	3
ENGL 111G	4	ENGL 218G	3
FIRE 114	3	FIRE 127	3
FIRE 126	3	FIRE 200	2
FIRE 128	3	FIRE 203	3
		Fire Science Elective	3
	16		17

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
CHEM 110G or 111G	4	MGT 201	3
FIRE 210	3	SOC 101G or 201G	3
FIRE 223	3	Fire Science Elective	3
FIRE 224	3	Fire Science Elective	3
Elective	3	Elective	3
		Elective	2
	16		17

# Hazardous Materials Technology

The **Hazardous Materials** program is designed to prepare students for entry-level employment as technicians in hazardous materials emergency response, waste management, environmental protection, water and waste water treatment, and state and federal regulatory agencies.

## Graduation Requirements

Certificate in Hazardous Materials: WorkKeys® scores of level 4 in Reading for Information, level 4 in Locating Information, and level 4 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

AAS in Heating, Air Conditioning, and Refrigeration: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

PHYS 211G/GL, General Physics I or	
PHYS 212G/GL, General Physics II .....	4
CHEM 111G, General Chemistry I.....	4
CHEM 112G, General Chemistry II.....	4
CHEM 211, Organic Chemistry.....	4
ET 115, Intro to Environmental Technology.....	3
ET 121, Applied Radiation Technology .....	3
ET 200, Special Topics.....	1
ET 215, Chemistry of Hazardous Materials .....	3
ET 225, Applied Industrial Hygiene and Safety .....	3
ET 248, Basic Hydrogeology.....	3
ET 261, Environmental Laws and Regulations .....	3
ET 275, Environmental Monitoring.....	4
ET 297, Emergency Response to HazMaz Incidents.....	3
ET 298, Radioactive/Hazardous Materials Waste Mgmt.....	3
MATH 121G, College Algebra or	
STAT 251G, Statistics for Business & Behav. Sciences .....	3

**TOTAL CREDITS .....**70

## Certificate in Hazardous Materials Technology

<b>Core Curriculum Requirements.....</b>	<b>32</b>
CHEM 111G, General Chemistry I.....	4
ET 115, Intro to Environmental Technology.....	3
ET 121, Applied Radiation Technology .....	3
ET 215, Chemistry of Hazardous Materials .....	3
ET 225, Applied Industrial Hygiene and Safety .....	3
ET 248, Basic Hydrogeology.....	3
ET 261, Environmental Laws and Regulations .....	3
ET 275, Environmental Monitoring.....	4
ET 297, Emergency Response to HazMaz Incidents.....	3
ET 298, Radioactive & Haz Waste Management .....	3

**TOTAL CREDITS .....**32

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Please contact the MSDP Department Chair for help with creating a customized plan.*

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Please contact the MSDP Department Chair for help with creating a customized plan.*

## Associate of Applied Science in Hazardous Materials Technology

<b>Branch Course Requirement.....</b>	<b>3</b>
COLL 101, College/Life Success.....	3
<b>Common Core &amp; Related Requirements.....</b>	<b>19</b>
ENGL 111G, Rhetoric & Composition .....	4
ENGL 203G, Business & Professional Communication or	
ENGL 218G, Tech & Scientific Communication.....	3
COMM 265G, Principles of Human Communication.....	3
CS 110, Computer Literacy .....	3
MATH 120, Intermediate Algebra.....	3
PSY 201G, Introduction to Psychology or	
SOC 101G, Introductory Sociology.....	3

**Core Course Requirements .....**48

BIOL 111G/GL, Natural History of Life w/lab or	
BIOL 221/L, Microbiology w/lab or	

# Health Physics

The **Health Physics** program is designed to prepare students for entry-level employment as technicians in hazardous materials emergency response, waste management, environmental protection, water and waste water treatment, and state and federal regulatory agencies.

## Graduation Requirements

AAS in Health Physics: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Applied Science in Health Physics

**Branch Course Requirement..... 3**  
COLL 101, College/Life Success.....3

**Common Core & Related Requirements..... 19**  
ENGL 111G, Rhetoric & Composition .....4  
ENGL 203G, Business & Professional Communication or  
ENGL 218G, Tech & Scientific Communication.....3  
COMM 253G, Public Speaking or  
COMM 265G, Principles of Human Communication .....3  
CS 110, Computer Literacy .....3  
MATH 120, Intermediate Algebra.....3  
PSY 201G, Introduction to Psychology or  
SOC 101G, Introductory Sociology.....3

**Core Course Requirements .....48**  
BIOL 111G/GL, Natural History of Life w/lab or  
BIOL 221/L, Microbiology w/lab or  
PHYS 211G/GL, General Physics I or  
PHYS 212G/GL, General Physics II .....4  
CHEM 111G, General Chemistry I.....4  
CHEM 112G, General Chemistry II.....4  
CHEM 211, Organic Chemistry.....4  
ET 115, Intro to Environmental Technology.....3  
ET 121, Applied Radiation Technology .....3  
ET 211, Applied Radiation Detection.....4  
ET 215, Chemistry of Hazardous Materials .....3  
ET 220, Internship .....1  
ET 221, Applied Radiation Biology.....3  
ET 248, Basic Hydrogeology .....3  
ET 261, Environmental Laws and Regulations .....3  
ET 271, Applied Radiation Protection.....3  
ET 275, Environmental Monitoring.....4  
ET 297, Emergency Response to HazMaz Incidents.....3  
ET 298, Radioactive/Hazardous Materials Waste Mgmt. ....3  
MATH 121G, College Algebra or  
STAT 251G, Statistics for Business & Behav. Sciences .....3

**TOTAL CREDITS .....70**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Please contact the MSDP Department Chair for help with creating a customized plan.*



# Hospitality and Tourism

The **Associate of Applied Science in Hospitality and Tourism** prepares the graduate for an entry-level position in the tourism. There are two options available – Food and Beverage/Culinary Arts and Lodging and Tourism. Training is offered in supervision, communication, marketing, finance, and operations. This program is designed for those entering the field as well as individuals already employed in the industry who want to upgrade their skills.

The majority of credits earned in this degree may be applied towards a Bachelor's degree in Hospitality, Restaurant and Tourism Management at NMSU Las Cruces.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Applied Science in Hospitality and Tourism

**Branch Course Requirement.....3**  
COLL 101, College & Life Success.....3

**General Education Common Core Requirements..... 16**  
COMM 265G, Principles of Human Communication.....3  
ECON 251G, Principles of Macroeconomics or  
ECON 252G, Principles of Microeconomics .....3  
ENGL 111G, Rhetoric & Composition .....4  
MATH 120, Intermediate Algebra or  
BOT 106, Business Math .....3  
PSY 201G, Introduction to Psychology or  
SOC 101G, Introductory Sociology .....3

**Related Requirements ..... 17**  
BOT 120, Accounting Procedures I.....3  
BOT 209, Business & Tech. Communications or  
ENGL 203G, Business & Prof. Communication or  
ENGL 218G, Tech. & Scientific Communication.....3  
BMGT 201, Work Readiness and Preparation.....2  
BMGT 231, Legal Issues in Business.....3  
OECS 105, Intro to Microcomputer Technology or  
CS 110, Computer Literacy.....3  
OECS 215, Spreadsheet Applications .....3

**Technical Requirements..... 36**  
HOST 201, Intro to the Hospitality Industry.....3  
HOST 203, Food & Beverage Operations .....3  
HOST 207, Customer Services for Hospitality .....3  
HOST 208, Hospitality Supervision.....3  
HOST 209, Managerial Accounting for Hospitality .....3  
HOST 219, Safety, Security & Sanitation .....3  
HOST 221, Cooperative Experience I.....3

**Electives..... 15**  
*Select 5 classes from one or both tracks, below.*

### Lodging & Tourism

HOST 202, Front Office Operations.....3  
HOST 204, Promotion of Hospitality Services .....3  
HOST 205, Housekeeping, Maintenance & Security .....3  
HOST 206, Travel & Tourism Operations.....3  
HOST 216, Event, Conference/Convention Operations.....3  
HOST 220, Experiential Travel.....3  
HOST 223, Travel Agency Principles.....3  
HOST 224, Travel Agency Booking & Operations .....3  
HOST 230, Wedding Events Management.....3

### Food & Beverage

CHEF 211, Food Production Management I.....3  
CHEF 212, Food Production Management II .....3  
CHEF 213, Bakery Management I .....3  
CHEF 214, Bakery Management II.....3  
HOST 210, Banquet Operations.....3  
HOST 218, Advanced Baking Techniques .....3

**TOTAL CREDITS ..... 72**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
HOST 201	3	HOST 203	3
OECS 105 or CS 110	3	OECS 215	3
COLL 101	3	BOT 106 or MATH 120	3
ENGL 111G	4	BOT 209, ENGL 203G or ENGL 218G	3
Elective	3	BMGT 231	3
		Elective	3
	16		18
		Summer	Cr.
		COMM 265G	3
		ECON 251G or 252G	3
			6

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
HOST 207	3	HOST 209	3
HOST 208	3	HOST 221	3
HOST 219	3	BMGT 201	2
BOT 120	3	PSY 201G or SOC 101G	3
Elective	3	Elective	3
		Elective	3
	15		17

# Heating, Air Conditioning, and Refrigeration

The **Heating, Air Conditioning, and Refrigeration (HACR)** program prepares students for entry-level positions in the HACR industry. Every new home, hospital, institutional building, shopping mall, and office complex requires trained and certified technicians to install and maintain HACR systems. New Mexico's climate creates an additional demand for technicians skilled in both heating and cooling technology. Among the program offerings is an EPA certification short course needed by all persons who work with refrigerants.

## Graduation Requirements

Certificate in Heating, Air Conditioning, and Refrigeration: WorkKeys® scores of level 4 in Reading for Information, level 5 in Locating Information, and level 5 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

AAS in Heating, Air Conditioning, and Refrigeration: ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Heating, Air Conditioning and Refrigeration

<b>Core Curriculum Requirements</b> .....	<b>27</b>
HVAC 101, Fundamentals of Refrigeration.....	4
HVAC 102, Fundamentals of Electricity.....	4
HVAC 103, Electrical & Mechanical Controls I.....	4
HVAC 104, Domestic Refrigeration.....	4
HVAC 207, Residential Air Conditioning Systems.....	4
HVAC 209, Residential Heating Systems.....	4
BCT 104, Woodworking Skills I.....	3

**TOTAL CREDITS** .....27

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
HVAC 101	4	HVAC 103	4
HVAC 102	4	HVAC 104	4
	8		8

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
HVAC 207	4	BCT 104	3
HVAC 209	4		
	8		3

## Associate of Applied Science in Heating, Air Conditioning and Refrigeration

<b>Branch Course Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success.....	3

<b>Common Core &amp; Related Requirements</b> .....	<b>16</b>
ENGL 111G, Rhetoric & Composition.....	4
ENGL 218G, Tech & Scientific Communication.....	3
BCIS 110, Intro to Computerized Info Systems.....	3
COMM 253G, Public Speaking or COMM 265G, Principles of Human Communication.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3

<b>Technical Requirements</b> .....	<b>42</b>
BCT 104, Woodworking Skills I.....	3
HVAC 101, Fundamentals of Refrigeration.....	4
HVAC 102, Fundamentals of Electricity.....	4
HVAC 103, Electrical & Mechanical Controls I.....	4
HVAC 104, Domestic Refrigeration.....	4
HVAC 118, Technical Math for HACR Technicians.....	3
HVAC 205, Commercial Refrigeration Systems.....	4
HVAC 207, Residential Air Conditioning Systems.....	4
HVAC 209, Residential Heating Systems.....	4
HVAC 210, Commercial AC & Heating Systems.....	4
HVAC 291, Field Experience.....	4

<b>Approved Electives</b> .....	<b>8</b>
<i>Complete 2 classes in consultation with an advisor. HVAC 220, Intro to Sheet Metal Fabrication is recommended as one of the two courses.</i>	

**TOTAL CREDITS** .....69

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
HVAC 101	4	HVAC 103	4
HVAC 102	4	HVAC 104	4
COLL 101	3	BCT 104	3
ENGL 111G	4	ENGL 218G	3
		Elective	4
	15		18

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
HVAC 118	3	HVAC 207	4
HVAC 205	4	HVAC 209	4
HVAC 210	4	HVAC 291	4
Approved elective	4	BCIS 110	3
COMM 253G or 265G	3		
PSY 201G or SOC 101G	3		
	18		15

# Health Information Technology

**Health Information Technology** is the comprehensive management of health information across computerized systems and its secure exchange between health care consumers and providers. The curriculum emphasizes medical billing and coding, anatomy and physiology, medical billing, records management, and pharmacology. Associate degree students must complete a cooperative experience. Because this is done in a healthcare setting, students may be required to pass a security background check.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Health Information Technology

### Core Curriculum Requirements ..... 14

ENGL 111G, Rhetoric & Composition ..... 4  
 COMM 265G, Principles of Human Communication..... 3  
 MATH 120, Intermediate Algebra..... 3

### Related Requirements ..... 15

BOT 110, Records Managements ..... 3  
 BOT 239, Personal Development..... 3  
 CS 110, Computer Literacy ..... 3  
 HIT/NURS 150, Medical Terminology..... 3  
 HIT/NURS 158, Advanced Medical Terminology..... 3

### Program Requirements ..... 13

AHS 140, Essentials of Anatomy & Physiology..... 4  
 AHS 202, Legal and Ethical Issues in Health Care ..... 3  
 BOT/HIT 203, Medical Office Procedures..... 3  
 BOT/HIT 228, Medical Insurance Billing ..... 3

### TOTAL CREDITS ..... 38

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
BOT 110	3	AHS 202	3
HIT/NURS 150	3	HIT/NURS 158	3
BOT/HIT 208	3	CS 110	3
BOT/HIT 228	3	ENGL 111G	4
BOT 239	3	MATH 120	3
	15		16
<b>Summer</b>			<b>Cr.</b>
AHS 140			4
COMM 265G			3
			7

## Associate of Applied Science in Health Information Technology

### Common Core & Related Requirements ..... 13

ENGL 111G, Rhetoric & Composition ..... 4  
 ENGL 203G, Business & Prof. Communication..... 3  
 COMM 265G, Principles of Human Communication..... 3  
 MATH 120, Intermediate Algebra..... 3

### Related Requirements ..... 21

BOT 110, Records Management..... 3  
 BOT 239, Personal Development..... 3  
 CS 110, Computer Literacy..... 3  
 HIT/NURS 150, Medical Terminology..... 3  
 HIT/NURS 158, Advanced Medical Terminology..... 3  
 MGT 201, Introduction to Management..... 3  
 STAT 251G, Statistics for Business & Behavioral Sciences ..... 3

### Technical Requirements..... 37

AHS 140, Essentials of Anatomy & Physiology..... 4  
 AHS 202, Legal and Ethical Issues in Health Care ..... 3  
 BOT/HIT 203, Medical Office Procedures..... 3  
 BOT/HIT 228, Medical Insurance Billing..... 3  
 HIT 120, Health Information Intro to Pharmacology ..... 3  
 HIT 140, Health Information Intro to Pathophysiology..... 3  
 HIT 221, Cooperative Experience I..... 3  
 HIT 222, Cooperative Experience II..... 3  
 HIT 240, Health Information Quality Management ..... 3  
 HIT 248, Medical Coding I..... 3  
 HIT 258, Medical Coding II ..... 3  
 HIT 268, Health Information Systems ..... 3

### TOTAL CREDITS ..... 71

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
BOT 110	3	HIT248	3
HIT/NURS 150	3	HIT/NURS 158	3
BOT/HIT 208	3	CS 110	3
BOT/HIT 228	3	ENGL 111G	4
BOT 239	3		
	15		13
<b>Summer</b>			<b>Cr.</b>
AHS 140			4
HIT 140			3
			7

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
HIT 221	3	HIT 240	3
HIT 258	3	HIT 248	3
HIT 268	3	MATH 120	3
HIT 120	3	COMM 265G	3
ENGL 203G	3		
	15		12

3<sup>rd</sup> year

Fall	Cr.	Spring	Cr.
HIT 222	3	Not applicable	
MGT 201	3		
STAT 251G	3		
	9		12

# Heritage Interpretation

The **Heritage Interpretation** program at NMSU Carlsbad emphasizes New Mexico's rich history, natural setting, and unique cultural blend. Students will study a variety of subjects that will broaden their knowledge of the Southwest's heritage and improve their ability to communicate with a diverse public. Two program options are available – the certificate in Heritage Interpretation and the Associate of Arts Degree in Heritage Interpretation.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Heritage Interpretation

### Core Curriculum Requirements ..... 14

Area I: English and Communication ..... 7  
 ENGL 111G, Rhetoric & Composition ..... 4  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication ..... 3

Area II: Mathematics ..... 3  
 Complete 1 "G" course from MATH or STAT

Area III: Laboratory Science ..... 4  
 Complete 1 Science "G" course with a lab from ASTR, BIOL, CHEM, ES, GEOG (must be GEOG 111G if selected), GEOL, or PHYS

**Department of History Requirements** ..... 15  
 ANTH 118, Historic Preservation ..... 3  
 ANTH 201G, Introduction to Anthropology ..... 3  
 HIST 101G, Roots of Modern Europe or  
 HIST 102G, Modern Europe ..... 3  
 HIST 201G, Intro to Early American History or  
 HIST 202G, Intro to Recent American History ..... 3  
 HIST 261, New Mexico History ..... 3

**Electives** ..... 4  
*Choose from ANTH, GOVT, HIST, MATH or SPAN*

**TOTAL CREDITS** ..... 33

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ANTH 201G	3	ANTH 118	3
ENGL 111G	4	COMM 253G or 265G	3
HIST 101G or 102G	3	HIST 201G or 202G	3
HIST 261	3	Area II	3
Elective	4	Area III	4
	17		16

## Associate of Arts in Heritage Interpretation

**Branch Course Requirement** ..... 3  
 COLL 101, College & Life Success ..... 3  
**General Education Requirements** ..... 36

Area I: English and Communication ..... 10  
 ENGL 111G, Rhetoric & Composition ..... 4  
 ENGL 203G, Business & Prof. Communication or  
 ENGL 211G, Writing in the Hum/Soc. Sci. or  
 ENGL 218G, Tech. & Scientific Communication ..... 3  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication ..... 3

Area II: Mathematics ..... 3  
 Complete 1 "G" course from MATH or STAT

Area III: Laboratory Science ..... 8  
 Complete 2 Science "G" courses with a lab from ASTR, BIOL, CHEM, ES, GEOG (must be GEOG 111G), GEOL, or PHYS

Area IV & V: Social/Behav. Sci. & Hum/Fine Arts ..... 15  
 Complete 2-3 Social/Behavioral Science "G" courses from ANTH CJ, CEP, ECON, GEOG (must be GEOG 112G or 120G if selected), GOVT, PHLS, LING, PSY, SOC, or SWK

Complete 2-3 Humanities/Fine Arts "G" courses from ART, ENGL, HIST, MUS, or THTR

**Department of History Requirements** ..... 24  
 ANTH 118, Historic Preservation ..... 3  
 ANTH 201G, Introduction to Anthropology ..... 3  
 HIST 101G, Roots of Modern Europe ..... 3  
 HIST 102G, Modern Europe ..... 3  
 HIST 201G, Early American History ..... 3  
 HIST 202G, Recent American History ..... 3  
 HIST 261, New Mexico History ..... 3  
 HIST 269, Internship in Heritage Interpretation ..... 3

**Electives** ..... 5  
*Choose from ANTH, GOVT, HIST, MATH or SPAN*

**TOTAL CREDITS** ..... 68

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
HIST 101G	3	HIST 201G	3
ANTH 201G	3	ANTH 118	3
COLL 101	3	Area II	3
ENGL 111G	4	ENGL 203G, 211G or 218G	3
Area III	4	Area V	3
		Elective	2
	17		17

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
HIST 201G	3	HIST 202G	3
HIST 261	3	HIST 269	3
COMM 253G or 265G	3	Elective	3
Area III	4	Elective	3
Elective	3	Elective	3
	16		18

# Industrial Maintenance Technician

The **Industrial Maintenance Technician** program prepares students with the education and experience necessary to begin employment within the Potash mining industry. Students receive training on state-of-the-art equipment which simulates the actual work performed both above and below ground potash mines. Additional exposure to the industry is provided through field experiences. Specializations offered within the curriculum include electrical and mechanical options.

## Graduation Requirements

**Certificate in Industrial Maintenance Technician:** WorkKeys® scores of level 3 in Reading for Information, level 4 in Locating Information, and level 3 in Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Industrial Maintenance Technician:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Industrial Maintenance Technician

<b>Core Curriculum Requirements</b> .....	<b>24</b>
INMT 133, Process Technology & Systems.....	4
INMT 134, Maintenance Principles.....	4
INMT 165, Equipment Processes.....	4
MAT 110, Machine Operations & Safety.....	3
MAT 145, Electromechanical Systems for non-majors.....	4
OETS 100, Industrial Safety.....	2
OETS 118, Mathematics for Technicians.....	3
<b>Program Option (choose one)</b> .....	<b>30</b>
<b>Electrical</b> .....	<b>30</b>
INMT 223, Electrical Repairs.....	4
INMT 205, Programmable Logic Controllers & Applications.....	2
MAT 130, Applied Industrial Electricity I.....	4
MAT 135, Applied Industrial Electricity II.....	4
MAT 234, Industrial Electricity Maintenance.....	3
OEET 110, Basic Electricity & Electronics.....	4
OEET 120, Basic Motor Controls.....	5
OEET 205, National Electric Code.....	3
OEET 295, Special Topics: Independent Project.....	1
<b>Mechanical</b> .....	<b>30</b>
INMT 235, Mechanical Drives I.....	4
INMT 236, Lubrication Processes.....	3
INMT 237, Hydraulics I.....	2
INMT 261, Pump Operations I.....	4
INMT 262, Piping Systems.....	2
INMT 263, Mechanical Drives II.....	4
INMT 264, Rigging.....	2
INMT 265, Hydraulics II.....	2
INMT 267, Pump Operations II.....	2
MAT 265, Sp. Topics in Automation & Manuf.: Ind. Project.....	2
WELD 105, Introduction to Welding.....	3
<b>TOTAL CREDITS</b> .....	<b>54</b>

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

## 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
INMT 133	4	INMT 134	4
OETS 100	2	INMT 165	4
OETS 118	3	MAT 145	4
MAT 110	3		
	12		12

## 2<sup>nd</sup> year

### Electrical

Fall	Cr.	Spring	Cr.
INMT 223	4	INMT 205	2
MAT 130	4	MAT 135	4
MAT 234	3	OEET 120	5
OEET 110	4	OEET 205	3
		OEET 295	1
	15		15

### Mechanical

Fall	Cr.	Spring	Cr.
INMT 235	4	INMT 233	4
INMT 236	3	INMT 234	2
INMT 237	2	INMT 235	2
INMT 261	4	INMT 237	2
INMT 262	2	MAT 265	2
		WELD 105	3
	15		15

## Associate of Applied Science in Industrial Maintenance Technician

<b>General Education Requirements</b> .....	<b>10</b>
ENGL 111G, Rhetoric & Composition.....	4
COMM 253, Public Speaking or COMM 265G, Principles of Human Communication.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3
<b>Core Curriculum Requirements</b> .....	<b>24</b>
INMT 133, Process Technology & Systems.....	4
INMT 134, Maintenance Principles.....	4
INMT 165, Equipment Processes.....	4
MAT 110, Machine Operations & Safety.....	3
MAT 145, Electromechanical Systems for non-majors.....	4
OETS 100, Industrial Safety.....	2
OETS 118, Mathematics for Technicians.....	3
<b>Program Option (choose one)</b> .....	<b>30</b>

<b>Electrical</b> .....	<b>30</b>
INMT 223, Electrical Repairs.....	4
INMT 205, Programmable Logic Controllers & Appl.....	2
MAT 130, Applied Industrial Electricity I.....	4
MAT 135, Applied Industrial Electricity II.....	4
MAT 234, Industrial Electricity Maintenance.....	3

OEET 110, Basic Electricity & Electronics.....	4
OEET 120, Basic Motor Controls.....	5
OEET 205, National Electric Code .....	3
OEET 295, Special Topics: Independent Project.....	1

<b>Mechanical</b> .....	30
INMT 235, Mechanical Drives I.....	4
INMT 236, Lubrication Processes.....	3
INMT 237, Hydraulics I.....	2
INMT 261, Pump Operations I.....	4
INMT 262, Piping Systems.....	2
INMT 263, Mechanical Drives II.....	4
INMT 264, Rigging.....	2
INMT 265, Hydraulics II.....	2
INMT 267, Pump Operations II.....	2
MAT 265, Sp. Topics in Automation & Manuf.: Ind. Project.....	2
WELD 105, Introduction to Welding .....	3

**TOTAL CREDITS ..... 54**

**Roadmap**

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
INMT 133	4	INMT 134	4
OETS 100	2	INMT 165	4
OETS 118	3	MAT 145	4
MAT 110	3	ENGL 111G	4
COMM 253G or 265G	3		
	15		12

2<sup>nd</sup> year  
Electrical

Fall	Cr.	Spring	Cr.
INMT 223	4	INMT 205	2
MAT 130	4	MAT 135	4
MAT 234	3	OEET 120	5
OEET 110	4	OEET 205	3
PSY 201G or SOC 101G	3	OEET 295	1
	18		15

Mechanical

Fall	Cr.	Spring	Cr.
INMT 235	4	INMT 233	4
INMT 236	3	INMT 234	2
INMT 237	2	INMT 235	2
INMT 261	4	INMT 237	2
INMT 262	2	MAT 265	2
PSY 201G or SOC 101G	3	WELD 105	3
	18		15

# Manufacturing Technology

The **Manufacturing Technology** program prepares students for entry-level technician positions in the construction, mining, and manufacturing industries.

The program contains two options sharing a common core curriculum. The Electronic Assembly option stresses computer, drafting, electrical, and mechanical skills, while the Manufacturing Processes option stresses application of those skills to computer-aided drafting (CAD), computer-aided manufacturing (CAM), and computer numerically controlled (CNC) machining systems. Training is conducted in a conventional machining laboratory, a state-of-the-art CAM and robotics laboratory, and modern CAD labs. Experienced manufacturing professionals provide the highest quality instruction in a “hands on” environment.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Applied Science in Manufacturing Technology

**Branch Requirement ..... 3**  
COLL 101, College/Life Success.....3

**Common Core & Related Requirements.....19**  
COMM 265G, Principles of Human Communication or  
COMM 253G, Public Speaking.....3  
ENGL 111G, Rhetoric & Composition .....4  
ENGL 218G, Technical & Scientific Communication.....3  
MATH 121G, College Algebra.....3  
MATH 175, Trigonometry.....3  
PSY 201G, Introduction to Psychology or  
SOC 101G, Introductory Sociology.....3

**Technical Requirements.....23**  
BUSA 111, Business in a Global Society or  
ACCT 222, Managerial Accounting.....3  
ET 106, Drafting Concepts/Computer Fundamentals I.....4  
ET 107, Intro to Materials Management .....3  
ET 120, Computation & Presentation Software .....3  
ET 183, Applied DC Circuits .....2  
ET 183L, Applied DC Circuits lab .....1  
ET 184, Applied AC Circuits.....2  
ET 184L, Applied Ac Circuits lab .....1  
ET 216, Drafting Concepts/Computer Fundamentals II.....4

**Program Options (Choose one) .....24**

### Electronics Assembly

ET 182, Digital Logic.....3  
ET 202, Introduction to Instrumentation .....3  
ET 204, Quality Assurance & Metrology Lab .....3  
ET 246, Electronic Devices I .....4  
ET 200, Special Topics.....3  
ET 272, Electronic Devices II.....4  
ET 282, Digital Electronics.....4

### Manufacturing Processes

ET 116, Industrial Processes .....2  
ET 117, Introduction to Materials.....2  
ET 204, Quality Assurance & Metrology Lab .....3  
ET 217, Manufacturing Processes .....2

ET 217L, Manufacturing Processes lab .....1  
ET 224, Project Planning, Implementation & Control.....4  
ET 234, Shop Floor Control Systems.....4  
ET 200, Special Topics.....3  
Approved Elective .....3

**TOTAL CREDITS .....69**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

### 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ET 106	4	ET 204	3
ET 120	3	ET 216	4
ET 183 & 184L	3	ET 184 & 184L	3
COLL 101	3	MATH 121G	3
ENGL 111G	4	ENGL 218G	3
	17		16
		Summer	Cr.
		COMM 253G or 265G	3
			3

### 2<sup>nd</sup> year

#### Electrics Assembly

Fall	Cr.	Spring	Cr.
ET 107	3	ET 202	3
ET 246	4	ET 272	4
ET 200	3	ET 282	4
ET 182	3	BUSA 111 or ACCT 222	3
MATH 175	3	PSY 201G or SOC 101G	3
	16		17

#### Manufacturing Processes

Fall	Cr.	Spring	Cr.
ET 107	3	ET 117	2
ET 116	2	ET 224	4
ET 200	3	ET 234	4
ET 217	3	BUSA 111 or ACCT 222	3
MATH 175	3	PSY 201G or SOC 101G	3
Elective	3		
	17		16

# Nursing

The nursing curriculum of NMSU Carlsbad prepares students for beginning nursing practice in a variety of health care settings. The program is approved by the State Board of Nursing, and the Associate Degree in Nursing is accredited by the Accreditation Commission for Education in Nursing (ACEN). Questions regarding accreditation should be directed to ACEN at (800) 669-1656 or (212) 363-5555; 3343 Peachtree Road NE, Suite 850, Atlanta, GA 30326.

Upon completion of the **Certificate for Practical Nursing**, graduates are eligible to write the National Council Licensure Exam (NCLEX-RN) which leads to licensure as a Practical Nurse. Upon completion of the **Associate Degree in Nursing**, graduates are eligible to write the National Council Licensure Exam that leads to licensure as a Registered Nurse.

Please note that certain felonious convictions may prohibit graduates from writing the NCLEX-RN in New Mexico. Students considering application to the nursing program who have any prior felony convictions should contact the appropriate Board of Nursing through which they intend to seek licensure prior to making application to this program. Graduates licensed as registered nurses in New Mexico do not meet licensure requirements in North Dakota.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Program Entrance Requirements

- BIOL 225, Human Anatomy & Physiology I
- CHEM 110G, Principles & Applications of Chemistry or one semester of high school chemistry with a C or higher. Chemistry should be taken within 5 years of application to the nursing program for student success.
- COLL 101, College & Life Success
- NA 101, Nursing Assistant Theory & Lab
- Completion of developmental studies English, math and reading as indicated by the student's placement test results if needed
- Cumulative GPA of 2.75 or higher in courses applicable to the nursing curriculum
- HESI A2 composite score of 75% and a minimum score of 60% in Math, Reading Comprehension, Vocabulary and General Knowledge, Grammar, and Anatomy & Physiology.
- Submission of a program application packet by May 15. Packets are available in the Nursing Administration Office in the Allied Health Building and online at carlsbad.nmsu.edu. Applications include a mandatory criminal background check.
- All students selected for admission to the nursing program must attend a mandatory orientation.

Students who have completed one year of anatomy with a C or higher at a New Mexico high school with an articulation agreement with NMSU may meet entrance requirements and should seek advisement from the nursing program. Science courses repeated more than twice will not be considered for admission requirements.

Courses from other nursing programs are evaluated by the Nursing Program Director; call (575) 234-9300 to inquire. Evaluation of non-nursing credits are processed by the registrar's office at NMSU Las Cruces.

## Curriculum Notes

- All courses that are part of the nursing curriculum must be completed with a C or higher.
- Students must be formally accepted into the nursing program to enroll in courses listed under "Nursing Program Requirements."
- CHEM 110G may not be used to fulfill elective credit. Note that CHEM 110G is required for the BSN degree at NMSU Las Cruces.
- BIOL 226, CEP 110G, ENGL 111G, PSY 201G, and SOC 101G must be completed by the second year of nursing.
- Students must also complete some work in the Learning Assistance Center (LAC) prior to beginning the nursing program. Visit with a nursing faculty advisor for more information.
- NURS 210 is not required for the LPN option. However, if this course is not taken and the student decides not to exit at the LPN level and wants to continue in the associate degree, the student must take NURS 210 (offered only in the spring) before progressing to the second year of nursing.
- Some out of state travel is required for certain clinical experiences.

## Certificate in Practical Nursing

<b>Core Curriculum Requirements</b> .....	<b>18</b>
BIOL 225, Human Anatomy & Physiology I.....	4
BIOL 226, Human Anatomy & Physiology II.....	4
CEP 110G, Human Growth & Behavior .....	3
ENGL 111G, Rhetoric & Composition .....	4
PSY 201G, Introduction to Psychology.....	3

<b>Nursing Program Requirements</b> .....	<b>23</b>
NURS 146, Common Health Deviations/Lab.....	6
NURS 153, Medication and Dosage Calculation .....	1
NURS 154, Physical Assessment.....	2
NURS 156, Basic Nursing Theory and Practice/Lab .....	6
NURS 157, Maternal/Child Health Deviations/Lab .....	8

**TOTAL CREDITS** ..... **41**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Note: BIOL 225 and NA 101 must be completed prior to entering the nursing program.

Fall	Cr.	Spring	Cr.
NURS 153	1	NURS 157	8
NURS 154	2	CEP 110G	3
NURS 156	6	ENGL 111G	4
BIOL 226	4	(NURS 210 if continuing	(1)
PSY 201G	3	with Assoc. in Nursing)	
	16		15
		<b>Summer</b>	<b>Cr.</b>
		NURS 146	6
			6



## Associate Degree in Nursing

<b>Branch Requirement .....</b>	<b>3</b>
COLL 101, College/Life Success.....	3
<b>Common Core &amp; Related Requirements.....</b>	<b>25</b>
<i>English &amp; Social Sciences.....</i>	
ENGL 111G, Rhetoric & Composition .....	4
CEP 110G, Human Growth & Behavior .....	3
SOC 101G, Introductory Sociology .....	3
PSY 201G, Introduction to Psychology.....	3
<i>Biology with lab .....</i>	
BIOL 221/L, Microbiology w/lab .....	4
BIOL 225, Human Anatomy & Physiology I.....	4
BIOL 226, Human Anatomy & Physiology II .....	4
<b>Nursing Program Requirements.....</b>	<b>40</b>
<i>Freshman Year Courses .....</i>	
NURS 153, Medication & Dosage Calculation.....	1
NURS 154, Physical Assessment.....	2
NURS 156, Basic Nursing Theory/Lab.....	6
NURS 157, Maternal/Child Health Deviations/Lab .....	8
NURS 210, Pharm Req-Childbearing Family .....	1
<i>Sophomore Nursing Courses.....</i>	
NURS 211, Pharm Req-Simple Health Deviations.....	1
NURS 246, Health Deviations I/Lab .....	7
NURS 258, Psychosocial Reqs: A Deficit Approach.....	3
NURS 212, Pharm Req-Complex Hlth Deviations .....	1
NURS 256, Health Deviations II/Lab.....	8
NURS 260, Mgmt of Patients w/Hlth Deviations/Lab.....	2
<b>Electives .....</b>	<b>2</b>
<b>TOTAL CREDITS .....</b>	<b>70</b>

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

#### 1<sup>st</sup> year

Note: BIOL 225 and NA 101 must be completed prior to entering the nursing program.

Fall	Cr.	Spring	Cr.
NURS 153	1	NURS 157	8
NURS 154	2	NURS 210	1
NURS 156	6	CEP 110G	3
BIOL 226	4	ENGL 111G	4
PSY 201G	3	SOC 101G	3
	16		19

#### 2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
NURS 211	1	NURS 212	1
NURS 246	7	NURS 256	8
NURS 258	3	NURS 260	2
BIOL 221 & lab	4	Elective	2
	15		13

### Essential Eligibility Requirements

The following essential requirements and examples of necessary activities (not all inclusive) should be used to assist each applicant in determining whether accommodations or modifications are necessary.

Essential Function	Example of Necessary Activities
Critical thinking abilities sufficient for clinical judgment.	Identify cause/effect relationships in clinical situation; develop nursing care plans.
Interpersonal abilities sufficient to interact with individuals, families, and groups from a variety of social, emotional, cultural, and intellectual backgrounds.	Establish rapport with patients/families and colleagues.
Communication abilities sufficient for interactions with others in verbal and written form.	Explain treatment procedures, initiate health teaching, document and interpret nursing actions and patient/client responses.
Abilities sufficient to move from room to room and to maneuver in small places.	Move around in patients' rooms, work spaces, and treatment areas, and administer cardio-pulmonary procedures.
Abilities sufficient to provide safe and effective nursing care.	Calibrate and use equipment; position patients/clients.
Abilities sufficient to monitor and assess health needs.	Hear monitor alarms, emergency signals, auscultatory sounds and cries for help.
Abilities sufficient for observation and assessment necessary in nursing care.	Observe patient/client responses.
Abilities sufficient for physical assessment.	Perform palpation, functions of physical examination and/or those related to therapeutic intervention, e.g. insertion of a catheter.
Ability to operate under stressful situations.	Perform within a crisis situation providing care to meet physical, emotional, or psychosocial needs of the patient/client.

ADA Guidelines apply to all qualified disabled persons. A qualified disabled person is a person with a disability who, with or without reasonable modification to rules, policies, or practices, and with the removal of architectural, communication, or transportation barriers, or the provision of auxiliary aids and services, meets the essential eligibility requirements for the receipt of services, or the participation in the programs or activities provided by a public entity **and** who can perform the "essential functions" of the position. Any student who, because of a disabling condition, may require some special arrangements in order to meet course requirements should contact the appropriate program chair as soon as possible to make necessary accommodations. Students should be prepared to present a disability verification form from their physician.

# Pre-Business

The **Associate Degree in Pre-Business** is a generalized two-year curriculum that provides students with the necessary general education and lower division courses that constitute a solid base for a bachelor's degree in one of the many areas of business concentration. These areas include accounting, finance, management, marketing, international business, and economics.

The program also provides entry level management skills for those students who decide to pursue employment rather than furthering their education, and fulfills the requirements needed before a major field may be declared in the College of Business Administration and Economics on the NMSU Las Cruces campus.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Pre-Business Degree

**Branch Requirement** ..... 3  
 COLL 101, College/Life Success.....3

**General Education Common Core**..... 36

Area I: English & Communications .....10  
*Must be completed with a C- or higher.*

ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Bus/Professional Communication.....3  
 COMM 253G, Public Speaking or  
 COMM 265G, Principles of Human Communication.....3

Area II: Mathematics.....3  
 Complete 1 "G" course from MATH or STAT

Area III: Laboratory Science.....8  
 Complete 2 Science "G" courses with a lab from ASTR, BIOL, CHEM, ES, GEOG (must be GEOG 111G), GEOL, or PHYS

Area IV & V: Social/Behav. Sci. & Hum/Fine Arts.....15  
*PSY 201G is strongly recommended.*

Complete 2-3 Social/Behavioral Science "G" courses from ANTH CJ, CEP, ECON, GEOG (must be GEOG 112G or 120G), GOVT, PHLS, LING, PSY, SOC, or SWK

Complete 2-3 Humanities/Fine Arts courses from ART, ENGL, HIST, MUS, or THTR

**College of Business Math Requirements** ..... 12  
*Students who place out of MATH 120 must complete 3 additional credits of electives outside the College of Business. MATH 120, MATH 121G, and STAT 251G must be completed with a C- or higher.*

MATH 120, Intermediate Algebra.....3  
 MATH 121G, College Algebra.....3  
 MATH 142G, Calculus for Business/Management.....3  
 STAT 251G, Statistics for Business/Behavioral Sciences.....3

**Business Core, Lower Division** ..... 18  
*Must complete with a C- or higher.*

ACCT 251, Management Accounting .....3  
 ACCT 252, Financial Accounting .....3  
 BCIS 110, Intro to Computerized Info Systems or  
 C S 110, Computer Literacy.....3  
 BUSA 111, Business in a Global Society.....3  
 ECON 251G, Principles of Macroeconomics.....3  
 ECON 252G, Principles of Microeconomics .....3

**Electives** ..... 6

**TOTAL CREDITS** ..... 66

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
COLL 101	3	BUSA 111	3
ENGL 111G	4	ENGL 203G	3
BCIS/CS 110	3	Area III	4
MATH 120 or higher	3	MATH 121G	3
Area V	3	Area V	3
	16		16

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
ACCT 221	3	ACCT 222	3
ECON 251G	3	ECON 252G	3
COMM 253G or 265G	3	STAT 251G	3
MATH 142G	3	Area III	4
Area IV/V	3	Elective	3
Elective	3		
	18		16

# Science

The **Associate of Science degree** is designed for the student interested in completing a Bachelor's of Science degree with a variety of majors and minors. This degree differs from the Associate of Arts degree in the heavy concentration of math and science course required of most Bachelor of Science degrees.

If the student knows the specific major, elective credits should be chosen to meet that major's requirements. If the potential major has not been chosen there is a wide list of courses that will help meet degree requirements of build the academic foundation to earn a Bachelor of Science degree.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate of Science Degree

**Branch Requirement** ..... 3  
 COLL 101, College Life/Success.....3

**Common Core Requirements**.....36

### Area I: English & Communication .....10

ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Business/Profess Communication or  
 ENGL 211G, Writing in Humanities/Social Sciences or  
 ENGL 218G, Technical/Profess. Communications .....3  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication .....3

### Area II: Mathematics .....3

Complete 1 "G" course from MATH (excluding MATH 121G) or STAT

### Area III: Laboratory Sciences .....8

Complete 2 Science "G" courses with a lab from ASTR, BIOL, CHEM, ES, GEOG (must be GEOG 111G if selected), GEOL, or PHYS

### Area IV/V: Social/Behav. Sci. and Hum/Fine Arts .....15

Complete 2-3 Social/Behavioral courses from:  
 ANTH 120G, Human Ancestors or  
 ANTH 125G, Introduction to World Cultures or  
 ANTH 201G, Introduction to Anthropology .....3  
 ECON 251G, Macroeconomics or  
 ECON 252G, Microeconomics .....3  
 GOVT 100G, American National Government or  
 GOVT 110G, Introduction to Political Science or  
 GOVT 150G, American Political Issues or  
 GOVT 160G, International Political Issues .....3  
 PSY 201G, Introduction to Psychology.....3  
 SOC 101G, Introductory Sociology or  
 SOC 201G, Contemporary Social Problems.....3

Complete 2-3 Humanities/Fine Arts "G" courses from:

ART 101G, Orientation in Art .....3  
 ENGL 244G, Literature and Culture .....3  
 HIST 101G, Roots of Modern Europe or  
 HIST 102G, Modern Europe or  
 HIST 201G, Intro to Early American History or  
 HIST 202G, Intro to Recent American History .....3  
 MUS 101G, Music Appreciation .....3  
 THTR 101G, The World of Theatre.....3

## Core Curriculum Requirements .....12-13

*Students who place above MATH 121G must take an additional 3credits of higher-level MATH or science electives.*

C S 110, Computer Literacy.....3  
 MATH 120, Intermediate Algebra.....3  
 MATH 121G, College Algebra.....3  
 CHIN 111, Beginning Chinese or  
 SPAN 111, Elementary Spanish I or  
 SPAN 112, Elementary Spanish II or  
 SPAN 211, Intermediate Spanish I or  
 SPAN 212, Intermediate Spanish II .....3-4

## Electives to bring total credits to 66.....14-15

Choose science or math courses from ASTR, BCIS, BIOL, CS, CHEM, ES, ET, ENGR, GEOG (must be GEOG 111G if selected), GEOL, MATH, PHYS, or STAT

## TOTAL CREDITS .....66

### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

#### 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
CS 110	3	Area IV/V	3
COLL 101	3	Elective	3
ENGL 111G	4	ENGL 203G/211G/ 218G	3
MATH 120	3	MATH 121G	3
Area III	4	Area III	4
	17		16

#### 2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
COMM 253G/265G	3	Area IV/V	3
Area II	3	Area IV/V	3
Area IV/V	3	Area IV/V	3
Elective	4	CHIN or SPAN	3-4
Elective	4	Elective	4
	17		16-17

# Security Guard Level One

The **Security Guard Level One Certificate** is designed to prepare students for entry-level employment as a security guard in office buildings, department stores, small businesses, colleges and universities. Graduates will be able to demonstrate mastery of state requirements for the minimum level of security entry, know and understand their role in security operations, administer basic first aid and CPR, and function effectively on teams.

## Graduation Requirements

WorkKeys® scores of level 3 in Reading for Information, Locating Information, and Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
OEPS 104	3	OEPS 106	3
OEPS 105	3	OEPS 107	3
OEPS 108	3		
	9		6

## Security Guard Level One Certificate

<b>Technical Requirements.....</b>	<b>15</b>
OEPS 104, Role of Security Guard.....	3
OEPS 105, Interview Skills, Evidence, Assets.....	3
OEPS 106, Chain of Command.....	3
OEPS 107, Courtroom Ethics and Demeanor.....	3
OEPS 108, CPR First Aid.....	3
<b>TOTAL CREDITS .....</b>	<b>15</b>

# Social Services

The **Associate Degree in Social Services** is designed to prepare students for careers in social service or community health agencies as paraprofessionals. In addition, because of the large general education component the degree also prepares the student for successful transition into a variety of baccalaureate degree majors including a Bachelor of Social Work (BSW) at NMSU Las Cruces. Note: Students interested in the BSW must have a minimum cumulative GPA of 2.5.

## Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Associate Degree in Social Services

**Branch Course Requirement.....3**  
 COLL 101, College & Life Success.....3

**General Education Requirements..... 36**

Area I: English and Communication.....10

ENGL 111G, Rhetoric & Composition .....4  
 ENGL 203G, Business & Prof. Communication or  
 ENGL 211G, Writing in the Hum/Soc. Sci. or  
 ENGL 218G, Tech. & Scientific Communication.....3  
 COMM 253G, Public Speaking or  
 COMM 265G, Princ. of Human Communication .....3

Area II: Mathematics.....3

Complete 1 “G” course from MATH or STAT

Area III: Laboratory Science..... 8

Complete 2 “G” courses from ASTR, BIOL, CHEM, ES, GEOG (must be GEOG 111G if selected), GEOL, or PHYS

Area IV & V: Social/Behav. Sci. & Hum/Fine Arts..... 15

*PSY 201G is recommended as it is a pre-requisite for SWK 253.*

Complete 2-3 Social/Behavioral Science “G” courses from ANTH CJ, CEP, ECON, GEOG (must be GEOG 112G or 120G if selected), GOVT, PHLS, LING, PSY, SOC, or SWK

Complete 2-3 Humanities/Fine Arts “G” courses from ART, ENGL, HIST, MUS, or THTR

**Social Service Requirements ..... 15**

PHLS 150G, Personal Health & Wellness.....3  
 PSY 266, Applied Psychology .....3  
 SWK 221G, Introduction to Social Welfare.....3  
 SWK 253, Case Management .....3  
 STAT 251G, Statistics for Business/Behavioral Sciences.....3

**Foreign Language Requirement .....3-8**

*Complete Spanish through the 112 or 212 level based on placement*

**Electives to bring total credits to 66.....4-9**

**TOTAL CREDITS ..... 66**

## Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ENGL 111G	4	ENGL 203G, 211G or 218G	3
COLL 101	3	Area II	3
Area III	4	Area III	4
PHLS 150G	3	Area IV/V	3
SWK 221G	3	SWK 253	3
	17		16

\*PSY 201G is recommended as it is a pre-req. for SWK 253

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
COMM 253G or 265G	3	Area IV/V	3
Area IV/V	3	Area IV/V	3
STAT 251G	3	Area IV/V	3
Elective	3	PSY 266	3
Elective	3	Spanish*	3-4
Spanish	3-4		
	17-18		15-16

\*Take elective if SPAN 112/212 is completed prior to this term

# Surgical Technology

## The Associate of Applied Science in Surgical Technology

teaches students the skills and concepts for performing the duties of a surgical technician, a healthcare professional who prepares operating rooms, arranges equipment, and assists doctor and nurses during surgeries. Graduates who successfully complete the program are eligible to take the National Board of Surgical Technology and Surgical Assisting (NBSTSA) certification examination.

### Graduation Requirements

ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

### Program Entrance Requirements

- Successful completion of developmental studies courses in English, math and reading as indicated by the student's placement test results
- Cumulative GPA of 2.0 or higher in courses applicable to the Surgical Technology curriculum
- HESI A2 composite score of 70% or higher
- Submission of a program application packet by **October 15**. Packets are available in the Allied Health Building.

Note: Science and technology courses may not be taken more than twice with a D or F; this could affect the student's eligibility for acceptance into the program.

## Associate of Applied Science in Surgical Technology

All courses must be completed with a C or higher.

### Common Core & Related Requirements ..... 14

*Students who are waived from CHEM 110G must take an additional 4 credits of approved electives.*

ENGL 111G, Rhetoric & Composition.....	4
CHEM 110G, Principles & Applications of Chemistry.....	4
MATH 120, Intermediate Algebra.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3

### Prerequisite Requirements ..... 15

HIT 150, Introduction to Medical Terminology.....	3
BIOL 221, Microbiology.....	3
BIOL 221L, Microbiology Lab.....	1
BIOL 225, Anatomy & Physiology I.....	4
BIOL 226, Anatomy & Physiology II.....	4

### Technical Requirements..... 39

*Students must complete all Common Core & Related Requirement as well as Prerequisite Requirements to be accepted into the Surgical Technology program and enroll in SURG courses.*

SURG 140, Introduction to Surgical Technology.....	4
SURG 145, Fund./Perioperative Concepts & Techniques.....	5
SURG 120, Surgical Technology Clinical I.....	4
SURG 155, Pharmacology for the Surgical Tech.....	3
SURG 150, Surgical Procedures I.....	5
SURG 260, Surgical Technology Clinical II.....	4
SURG 160, Surgical Procedures II.....	4
SURG 265, Surgical Technology Clinical III.....	7
SURG 230, Professional Readiness.....	3

### TOTAL CREDITS ..... 68

### Roadmap

*Additional classes may be needed based on placement test results and/or course prerequisites. Visit with an advisor for help with creating a customized plan.*

#### 1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
ENGL 111G	4	PSY 201G or SOC 101G	3
CHEM 110G or elective	4	MATH 120	3
BIOL 225	4	BIOL 226	4
HIT 150	3		
	14		10

#### 2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
BIOL 221+Lab	4	SURG 140	4
		SURG 145	5
		SURG 120	4
		SURG 155	3
	4		16
		Summer	Cr.
		SURG 150	4
		SURG 260	4
			9

#### 3<sup>rd</sup> year

Fall	Cr.	Spring	Cr.
SURG 160	4	Not applicable	
SURG 265	3		
SURG 230	7		
	14		

# Welding Technology

The **Welding Technology** program provides specialized training to prepare students for entry-level positions as welder. All aspects of welding are covered including oxy-acetylene welding and cutting, braze welding, arc welding, gas metal arc welding (GMAW), gas tungsten arc welding (GTAW), and pipe welding.

## Graduation Requirements

**Certificate in Welding Technology:** WorkKeys® scores of level 4 in Reading for Information, Locating Information, and Applied Mathematics; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

**AAS in Welding Technology:** ENGL 111G with a C or higher; placement into college-level math and reading courses or completion of developmental courses with a C or higher; cumulative GPA of 2.0 or higher; the last 15 credits taken at NMSU.

## Certificate in Welding

<b>Core Curriculum Requirements</b> .....	<b>30</b>
WELD 100, Structural Welding I.....	6
WELD 105, Introduction to Welding .....	3
WELD 110, Blueprint Reading (Welding).....	3
WELD 115, Structural Welding II.....	6
WELD 125, Introduction to Pipe Welding.....	3
WELD 130, Introduction to GMAW (MIG).....	3
WELD 140, Introduction to GTAW (TIG).....	3
WELD 150, Pipe Welding II .....	3
<b>TOTAL CREDITS</b> .....	<b>30</b>

### Roadmap

*Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
WELD 100	6	WELD 115	6
WELD 125	3	WELD 150	3
WELD 130	3	WELD 105	3
	12		12

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
WELD 110	3	Not applicable	
WELD 140	3		
	6		

## Associate of Applied Science in Welding

<b>Branch Requirement</b> .....	<b>3</b>
COLL 101, College/Life Success.....	3

<b>Common Core Requirements</b> .....	<b>13</b>
ENGL 111G, Rhetoric & Composition .....	4
ENGL 203G, Bus/Professional Communication or ENGL 218G, Technical & Scientific Communication.....	3

COMM 265G, Principles of Human Communication.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3

<b>Core Curriculum Requirements</b> .....	<b>48</b>
DRFT 118, Geometry for Drafting.....	3
WELD 100, Structural Welding I.....	6
WELD 105, Introduction to Welding .....	3
WELD 110, Blueprint Reading (Welding).....	3
WELD 115, Structural Welding II.....	6
WELD 125, Introduction to Pipe Welding .....	3
WELD 126, Industrial Pipe Welding I.....	3
WELD 130, Introduction to GMAW (MIG).....	3
WELD 140, Introduction to GTAW (TIG).....	3
WELD 150, Pipe Welding II .....	3
WELD 151, Industrial Pipe Welding II .....	3
WELD 170, Welded Fabrication.....	3
WELD 211, Welder Qualification.....	6

<b>Electives</b> .....	<b>2</b>
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<b>TOTAL CREDITS</b> .....	<b>66</b>
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### Roadmap

*Additional classes may be needed based on placement test results and course prerequisites. Visit with an advisor for help with creating a customized plan.*

1<sup>st</sup> year

Fall	Cr.	Spring	Cr.
WELD 100	6	WELD 115	6
WELD 125	3	WELD 150	3
WELD 130	3	WELD 105	3
WELD 140	3	COLL 101	3
	15		15
		Summer	Cr.
		WELD 170	3
		PSY 201G or SOC 101G	3
			6

2<sup>nd</sup> year

Fall	Cr.	Spring	Cr.
WELD 110	3	WELD 211	6
WELD 126	3	WELD 151	3
DRFT 118	3	COMM 265G	3
ENGL 111G	4	ENGL 203G OR 218G	3
Elective	2		
	15		15

# Course Descriptions

## COURSE TITLES

Courses are titled in the following style:

ASTR 110G. Introduction to Astronomy .... .4 cr.

Course number, 110, indicates the course is a Freshman course.

Suffix G indicates a New Mexico Common Course.

Credits – The unit of university credit is the semester hour, which is the equivalent of one hour's recitation or a minimum of two hours of practice per week for one semester.

## Course Number Designation

100-199 – Freshman courses

200-299 – Sophomore courses

The letter N will be added as a suffix to the course number when the course credits are not applicable to the baccalaureate and specific associate degrees, or certificates.

## ACCT - ACCOUNTING

### ACCT 200. A Survey of Accounting ... (3 cr.)

Emphasis on financial statement interpretation and development of accounting information for management. For engineering, computer science, and other non-business majors. Prerequisite: one C S course or consent of instructor. Community Colleges only.

### ACCT 221. Financial Accounting ... (3 cr.)

Interpretation and use of financial accounting information for making financing, investing, and operating decisions.

### ACCT 222. Management Accounting ... (3 cr.)

Development and use of accounting information for management decision making. Prerequisite(s): ACCT 221. Required. Restricted to: Community Colleges only.

## AG E – AGRICULTURAL ECONOMICS

### AG E 100. Intro Agricultural Economics and Business .. (3 cr.)

Orientation to agricultural supply businesses, farm and ranch production, food markets, food processing and distribution, and food consumption. Microeconomic principles for managers.

### AG E 210G. Survey of Food & Agricultural Issues.. ... (3 cr.)

Survey of food and agricultural issues, including: geography of food production and consumption; human-agricultural-natural resource relations; agriculture in the United States and abroad; modern agribusiness; food safety; food, agriculture, and natural resources policy; ethical questions; role and impact of technology. Same as HNFS 210G.

### AG E 236. Agribusiness Management Principles ... (3 cr.)

Description and application of management and financial principles, market planning, and organization theory in small business situations.

## AGRO - AGRONOMY

### AGRO 100G. Introductory Plant Science ... (4 cr.)

Introduction to the physical, biological, and chemical principles under-

lying plant growth and development in managed ecosystems. In the laboratory portion of the class, students perform experiments demonstrating the principles covered in lecture. The course uses economic plants and agriculturally relevant ecosystems to demonstrate basic principles. Appropriate for non-science majors. Same as HORT 100G.

### AGRO 250. Plant Propagation ... (3 cr.)

Practical methods of propagating horticultural plants by seed, cuttings, layering, grafting, division and tissue culture. Examination of relevant physiological processes involved with successful plant propagation techniques. Crosslisted with HORT 250.

## AHS – ALLIED HEALTH SCIENCE

### AHS 140. Essentials of Anatomy and Physiology ... (4 cr.)

Essentials of anatomy and physiology for those considering a career in health as well as those interested in understanding their own body and the basics of health.

### AHS 202. Legal and Ethical Issues in Health Care ... (3 cr.)

Consideration of legal and ethical issues in modern health care delivery.

## ANSC - ANIMAL SCIENCE

### ANSC 100. Introductory Animal Science ... (3 cr.)

Orientation and survey of livestock industry in the United States; introduction to feeding, breeding, and management practices for producing farm animals and select companion animals.

### ANSC 100L. Intro Animal Science Lab ... (1 cr.)

Students will observe and participate in activities related to farm animal management and will include areas of livestock selection, nutrition, reproductive physiology, animal ID and animal health. This lab is required for animal science majors. Pre/Corequisite(s): ANSC 100.

### ANSC 200. Introduction to Meat Animal Production ... (3 cr.)

Production and utilization of beef cattle, sheep and swine; emphasis on feeding, breeding, management problems and marketing; selection of animals for breeding and market.



## ANTH - ANTHROPOLOGY

**ANTH 115. Native Peoples of North America** . . . . . (3 cr.)  
General survey of the ethnology of selected Native American groups.

**ANTH 118. Introduction to Historic Preservation** . . . . . (3 cr.)  
Introduction to historic preservation, its history, goals, methods, legal basis, and economic importance. Explores public role in decision-making. Community Colleges only.

**ANTH 120G. Human Ancestors** . . . . . (3 cr.)  
Evolutionary history of the human species from its origin in the primate order, with primary emphasis on the evolution of humankind during the past three million years. Examination of the social lives of apes and consideration of similarities to and differences from them. Biological foundations of human behavior, emphasizing thought, movement, and interaction.

**ANTH 125G. Introduction to World Cultures** . . . . . (3 cr.)  
Introductory survey of anthropological studies of human thought and behavior in different world cultures, covering social, cultural, economic, political, and religious practices and beliefs.

**ANTH 201G. Introduction to Anthropology** . . . . . (3 cr.)  
Exploration of human origins and the development of cultural diversity. Topics include biological and cultural evolution, the structure and functions of social institutions, belief systems, language and culture, human-environmental relationships, methods of prehistoric and contemporary cultural analysis, and theories of culture.

**ANTH 297. Elementary Special Topics** . . . . . (1-4 cr.)  
Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

## ART - ART

**ART 101G. Orientation in Art** . . . . . (3 cr.)  
A multicultural examination of the principles and philosophies of the visual arts and the ideas expressed through them.

**ART 150. Drawing I.** . . . . . (3 cr.)  
Introduction to the skill of seeing through exercises that emphasize careful drawing from the still life and utilize a range of drawing materials and techniques. Outside assignments required.

**ART 151. Drawing II** . . . . . (3 cr.)  
Continued emphasis on drawing from observation by focusing on still life and other subject matter. Covers a range of materials, techniques and concepts. Outside assignments. Prerequisite(s): ART 150. Restricted to ART and CMI majors.

**ART 155. 2-D Fundamentals** . . . . . (3 cr.)  
Introduction to two-dimensional space emphasizing visual elements and design principles as they apply to composition. A variety of materials are used in the studio projects and sketchbook exercises. Developing knowledge in vocabulary, color theory and skill in translating ideas into design are encouraged. Restricted to Community Colleges campuses only.

**ART 157. Color Theory** . . . . . (3 cr.)  
Various color theories as they relate to compositional organization. Required for art education majors.

**ART 250. Introduction to Drawing** . . . . . (3 cr.)  
Introduction to technical, structural and methodological skills applied to drawing from observation. Subjects include still life and live figure models.

**ART 252. Aspects of Drawing** . . . . . (2-3 cr.)  
Continued work in drawing with emphasis on personal creative endeavor. Prerequisites: ART 150, ART 151, and ART 250. Community Colleges only.

**ART 260. Introduction to Painting** . . . . . (3 cr.)  
Introduction to basic skills of painting through various exercises that emphasize working from observation. Prerequisite(s): Art 250 or ART 150.

**ART 261. Painting Methods, Techniques & Appls.** . . . . . (3 cr.)  
The investigation of formal aspects of painting, an examination of painting techniques, and an exploration of various methodologies regarding form and content as applied to critical thinking skills through medium of paint. Prerequisite(s): ART 150, ART 260.

**ART 262. Aspects of Painting** . . . . . (2-3 cr.)  
Varied painting media: continued development of painting skills. Prerequisites: ART 150, ART 155 (for art majors), ART 260, or consent of instructor.

**ART 294. Special Topics in Studio** . . . . . (1-3 cr.)  
Specific subjects and credits to be announced in the Schedule of Classes. No more than 9 credits toward a degree. Prerequisite: consent of instructor.

## ASTR - ASTRONOMY

**ASTR 105G. The Planets** . . . . . (4 cr.)  
Comparative study of the planets, moons, comets, and asteroids which comprise the solar system. Emphasis on geological and physical processes which shape the surfaces and atmospheres of the planets. Laboratory exercises include analysis of images returned by spacecraft. Intended for non-science majors, but some basic math required. This lecture/lab course satisfies the New Mexico Common Core Area III: Lab Sciences requirement

**ASTR 110G. Introduction to Astronomy** . . . . . (4 cr.)  
A survey of the universe. Observations, theories, and methods of modern astronomy. Topics include planets, stars and stellar systems, black holes and neutron stars, supernovas and gaseous nebulae, galaxies and quasars, and cosmology. Emphasis on physical principles involving gravity, light and optics (telescopes). Generally non-mathematical. Laboratory involves use of the campus observatory and exercises designed to experimentally illustrate principles of astronomy. This lecture/lab course satisfies the New Mexico Common Core Area III: Lab Sciences requirement.

## AUTO - AUTOMOTIVE TECHNOLOGY

### **AUTO 112. Basic Gasoline Engines . . . . . (5 cr.)**

Principles of gasoline engine operation. Identification, design, function of engine components; engine disassembly and reassembly; trouble shooting, and rebuilding heads.

### **AUTO 117. Elec. Analysis/Tune-Up Gas Engines (5 cr.)**

Theory and operation of ignition and emission control systems and fuel system. Use of troubleshooting equipment and diagnostic equipment. Prerequisite: AUTO 120 or consent of instructor.

### **AUTO 118. Technical Math for Mechanics . . . . . (3 cr.)**

Mathematical applications for the automotive trade.

### **AUTO 119. Manual Transmission/Clutch . . . . . (5 cr.)**

Manual transmission, transfer cases, and clutch operating principles. Students will diagnose problems, remove and replace, disassemble, repair, and assemble units.

### **AUTO 120. Electrical Systems . . . . . (4 cr.)**

Troubleshooting and repair of starters, alternators, and associated circuits. Reading electrical diagrams, diagnosis and repair of electrical accessories. Prerequisite: consent of instructor.

### **AUTO 125. Brakes . . . . . (5 cr.)**

Theory of operation, diagnosis, repair, and maintenance of disc and drum brakes; safety and use of special tools.

### **AUTO 126. Suspension, Steering, and Alignment . . . . . (5 cr.)**

Types of steering systems, suspension maintenance and repair, four-wheel alignment procedures.

### **AUTO 127. Basic Automatic Transmission. . . . . (4 cr.)**

Theory and operation of the automatic transmission; maintenance, troubleshooting, diagnosis, and repair of components.

### **AUTO 132. Automotive AC and Heating Systems.. . . . (4 cr.)**

Theory and operation, reading schematic diagrams, troubleshooting, repair, and replacement operations performed.

### **AUTO 137. Fuel Systems and Emission Controls . . . . . (4 cr.)**

Covers theory and operation of fuel system and emission control. Troubleshooting, vacuum diagrams, overhaul, repair and adjustment of carburetion and fuel injection. Prerequisites: AUTO 117 or consent of instructor.

### **AUTO 145. Shop Management . . . . . (3 cr.)**

Covers principles of shop safety, regulations, layout, and operation management.

### **AUTO 161. Non-Structural Repair . . . . . (4 cr.)**

This basic auto body course is designed to develop the students understanding of general shop safety using hand tools, pneumatic tools and power tools. This course will also cover straightening fundamentals, plastic and composite repair, panel replacement, and adjustments. Prerequisite(s): AUTO 190.

### **AUTO 162. Advanced Non-Structural Repair I. . . . . (4 cr.)**

This course will involve the students in all phases of minor non- structural collision damage repairs. It will encompass sheet metal repair,

advanced panel replacement and alignment. Prerequisite(s): AUTO 161.

### **AUTO 163. Advanced Non-Structural Repair II . . . . . (4 cr.)**

This course is a continuation of AUTO 162 with emphasis in all phases of minor non-structural damage repair. The student will be instructed in sheet metal repair and panel alignment as well as the R&I of automotive glass and related components. Prerequisite(s): AUTO 162.

### **AUTO 164. Automotive Industry Collision Repair I . . . . . (4 cr.)**

This advanced course is a continuation of AUTO 161, 162, and 163. This course will incorporate all areas of major non-structural collision damage repair. Through practical application the student will learn how to effectively repair all heavy collision damage using current I-CAR repair standards and procedures. Prerequisite(s): AUTO 163.

### **AUTO 165. Automotive Industry Collision Repair II . . . . . (4 cr.)**

This advanced course is a continuation of AUTO 164 with emphasis on time efficiency. This course will involve the student in all areas of major collision damage repair. The student will be exposed to all applicable I-CAR industry procedures and standards involved in sheet metal and composite panel repair. Prerequisite(s): AUTO 164.

### **AUTO 172. Introduction to Automotive Refinishing . . . . . (4 cr.)**

This course is designed to incorporate all aspects of surface preparation, paint safety, refinishing materials, and refinishing fundamentals. Students will receive instructions for the application of acrylic enamel and base coat/clear coat refinishing systems.

### **AUTO 174. Intermediate Automotive Refinishing.. . . . . (4 cr.)**

This course encompasses all areas of surface preparation, damage repair and refinishing procedures that are necessary for achieving a proper spot repair. Students will also be exposed to safe work habits in the refinishing area and correct automotive detailing procedures. Prerequisite(s): AUTO 172.

### **AUTO 176. Automotive Color Adjustment & Blend . . . . . (4 cr.)**

This course will help develop the skills needed to match any type of paint. It will expose the student to color theory, color evaluation, color matching, and other color adjustment factors. The student will be instructed in multiple panel paint blending techniques as well. Prerequisite(s): AUTO 174.

### **AUTO 178. Automotive Overall Refinishing . . . . . (4 cr.)**

This course encompasses all areas of automotive refinishing. This advanced course is a continuation of AUTO 176 with emphasis in achieving industry refinishing times and standards consistent with that of I-CAR. The student will be exposed to surface preparation and refinishing techniques involved with overall coat/clear coat refinishing system. Prerequisite(s): AUTO 176.

### **AUTO 181. Frame and Structural Repair.. . . . . (4 cr.)**

This course will involve the student in all areas of frame and structural damage repairs. Through theory and practical application, the student will learn how to diagnose and repair various types of damage include: mash, twist, sag, and side sway. This course will expose the students to safe work habits while using measuring and straightening equipment. Prerequisite(s): AUTO 165.

### **AUTO 182. Structural Panel Replacement . . . . . (4 cr.)**

This course is a continuation of AUTO 181 with infancies in structural panel replacement. The student will be exposed to frame and unibody

measuring equipment and their proper use in sectioning procedures. Through theory and practical application the student will learn how to ID structural components, properly separate spot welds, position and weld new body panels in place. Prerequisite(s): AUTO 181.

**AUTO 190. Sheet Metal Welding . . . . . (3 cr.)**

This course is designed to introduce students to MIG welding procedures, set up and terminology used in sheet metal welding. The students will be exposed to all areas of MIG, oxy acetylene, and plasma torch industry safety. This course will provide the students with the basic knowledge and hands on experience to successfully demonstrate proper sheet metal welds in a variety of joints and welding positions.

**AUTO 221. Cooperative Experience I . . . . . (1-6 cr.)**

Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U. Prerequisite: consent of instructor.

**AXED – AGRICULTURAL AND EXTENSION EDUCATION**

**AXED 105. Tech. in Agricultural Mechanization. . . . . (3 cr.)**

Development of competencies in agricultural mechanics including safety, tool identification, operation and maintenance of hand and power tools, cold metal, drafting, and plumbing procedures. Designed for any major wishing to improve mechanical skills needed in agriculturally related occupations in education and industry.

**AXED 201G. Eff. Ldrship./Comm. in Agricultural Org. (3 cr.)**

Theory and practice in leadership and communication for professionals who must work effectively in leadership and supervisory roles with people in agricultural business, industry, government agencies, and education. Course focuses on contemporary leadership theories. Oral communication skills in informative and persuasive speaking, parliamentary procedure, and for small groups are developed.

**BCIS - BUSINESS COMPUTER INFORMATION SYSTEMS**

**BCIS 110. Intro. to Computerized Info Systems . . . . . (3 cr.)**

Computerized information systems, their economic, and social implications. Introduction to microcomputer hardware, personal productivity software, and communications.

**BCIS 122. Intro. to Info Systems Programming . . . . . (3 cr.)**

Includes basic computer algorithms in current programming environments and the Java programming language. Prerequisite(s): C or better in BCIS 110 or C S 110; and MATH 120.

**BCT – BUILDING CONSTRUCTION TECHNOLOGY**

**BCT 100. Building Trades I . . . . . (8 cr.)**

Equipment and general safety. Human relations, building construction surveying, footings, foundation form work, framing, sheathing, insulation. Basic electrical wiring and plumbing. Classroom instruction, on-the-job training, and problem solving.

**BCT 103. Introduction to Construction Laboratory . . . . . (3 cr.)**

Provides students the opportunity to practice skills they have acquired

in BCT 101 and BCT 102. It includes task-oriented projects in which students can apply many of the skills and knowledge that have been presented throughout the National Center for Construction and Education Research (NCCER) Carpentry Program. Corequisite(s): BCT 101 or BCT 102. Restricted to: Community Colleges only.

**BCT 104. Woodworking Skills I . . . . . (3 cr.)**

Use and care of hand tools and elementary power tools, safety procedures, and supervised project construction.

**BCT 105. Woodworking Skills II . . . . . (3 cr.)**

Advanced woodworking skills to include use of advanced power tools, power tool safety, and supervised construction. Prerequisite: BCT 104 or consent of instructor.

**BCT 110. Blueprint Reading for Building Trades . . . . . (4 cr.)**

Same as DRFT 151, OEET 101, OEPB 110.

**BCT 118. Math for Building Trades. . . . . (3 cr.)**

Geometry, algebra, arithmetic, and basic trigonometry pertaining to mathematical applications in the building trades' field. Prerequisite: CCDM 103N. Same as OEET 118, DRFT 118, OEPB 118.

**BCT 200. Building Trades II . . . . . (8 cr.)**

Continuation of BCT 100: roofing; exterior and interior finish; masonry; door, window, and cabinet installation.

**BCT 221. Cooperative Experience I . . . . . (1-4 cr.)**

Supervised cooperative work program. Student is employed in an approved occupation and is supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U. Prerequisite: consent of instructor.

**BCT 255. Special Topics . . . . . (1-6 cr.)**

Topics to be announced in the Schedule of Classes. May be repeated up to 6 credits. Consent of Instructor required. Restricted to: Community Colleges only.

**BCT 290. Spec. Problems in Building Technology. . . . . (1-4 cr.)**

Individual studies in areas directly related to building technologies. Prerequisite: consent of instructor.

**BIOL - BIOLOGY**

**BIOL 101G. Human Biology . . . . . (3 cr.)**

Introduction to modern biological concepts. Emphasis on relevance to humans and their relationships with their environment. Cannot be taken for credit after successful completion of BIOL 111G or BIOL 211G. Appropriate for non-science majors. Requires successful completion of BIOL 101GL in order to meet the NM Common Core Area III Laboratory Science requirements.

**BIOL 101GL. Human Biology Laboratory. . . . . (1 cr.)**

Laboratory for BIOL 101G. Laboratory experiences and activities exploring biological concepts and their relevance to humans and their relationship with their environment. Prerequisite(s)/Corequisite(s): BIOL 101G.

**BIOL 111G. Natural History of Life . . . . . (3 cr.)**

Survey of major processes and events in the genetics, evolution, and

ecology of microbes, plants and animals, and their interactions with the environment. Appropriate for nonscience majors. Must be taken with BIOL 111L to meet general education requirements.

**BIOL 111GL. Natural History of Life Laboratory . . . . . (1 cr.)**

Laboratory experiments, demonstrations and exercises on inter-relationships among organisms, biodiversity, processes of evolution, and interaction of organisms and their environment. Prerequisite(s)/Corequisite(s): BIOL 111G.

**BIOL 211G. Cellular and Organismal Biology.. . . . . (3 cr.)**

Principles of cellular structure and function, genetics, and physiology of microbes, plants, and animals. Suitable for nonmajors with sufficient chemistry. Must be taken with BIOL 211L to meet general education requirements. Pre/Corequisite(s): CHEM 110G or CHEM 111 or CHEM 115.

**BIOL 211GL. Cellular and Organismal Biol. Lab. . . . . (1 cr.)**

Laboratory demonstrations, experiments and exercises on molecular and cellular biology and organismal physiology. Must have passed BIOL 211G or be concurrently enrolled in BIOL 211G and BIOL 211L. Pre/Corequisite(s): CHEM 110 or CHEM 111 or CHEM 115.

**BIOL 221 L. Intro. Microbiology Laboratory. . . . . (1 cr.)**

A laboratory course to accompany BIOL 221 or BIOL 219. Prerequisite: BIOL 221 or BIOL 219 or concurrent enrollment.

**BIOL 221. Introductory Microbiology .. . . . . (3 cr.)**

Principles of isolation, taxonomy, and physiology of microorganisms. Prerequisite: CHEM 110G or CHEM 111G, equivalent or consent of instructor. Corequisite: BIOL 221L. Community Colleges only.

**BIOL 225. Human Anatomy and Physiology I . . . . . (4 cr.)**

The first in a two-course sequence that covers the structure and function of the human body, including terminology of the human gross anatomy, chemistry overview, cell structure, cell physiology (including DNA, protein synthesis and cell division). The organization of cells and tissues and their metabolic and homeostatic processes and regulation are also covered. Physical and chemical operation of organs and systems of the human body include the integumentary, skeletal, muscular, and nervous systems. Pre/Corequisite(s): CHEM 110G or CHEM 111G. Restricted to: Community Colleges only.

**BIOL 226. Human Anatomy and Physiology II . . . . . (4 cr.)**

The second in a two-course sequence that covers the structure and function of the human body. Includes the physical and chemical operation of the organs and systems of the human body, including endocrine, cardiovascular, lymphatic, immune, respiratory, digestive, urinary and reproduction system. Concepts of nutrition, metabolism, energy, fluid and electrolyte balance, heredity pregnancy and human embryonic and fetal development are also covered. Prerequisite(s): BIOL 225, CHEM 110G or CHEM 111G. Restricted to: Community Colleges only.

**BIOL 250. Special Topics.. . . . . (1-3 cr.)**

Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 6 credits. Community Colleges only.

**BLAW - BUSINESS LAW**

**BLAW 230. Business Law .. . . . . (3 cr.)**

Introduction to law in general and application to business specifically; comprehensive study of the law of contracts; and the principal and agent relationship. Offered at all NMSU Community Colleges except Dona Ana Community College. Credit may not be earned in both BLAW 230 and BLAW 317.

**BLAW 316 Legal Environment of Business . . . . . (3 cr.)**

Survey of business law including: the legal system (court systems, sources and types of law, litigation and dispute resolution), ethics and corporate social responsibility, administrative law, tort law, contract law, agency and employment law, business structure and governance, securities regulations and international law.

**BMGT – BUSINESS MANAGEMENT**

**BMGT 110. Introduction to Business . . . . . (3 cr.)**

Terminology and concepts of the business field. Role of accounting, computers, business management, finance, labor, and international business in our society. Restricted to: Community Colleges only.

**BMGT 112. Principles of Banking .. . . . . (3 cr.)**

Banking in today's economy: language and documents of banking, check processing, teller functions, deposit function, trust services, bank bookkeeping, loans, and investments. Restricted to: Community Colleges only.

**BMTG 140. Principles of Supervision I . . . . . (3 cr.)**

Principles of supervision emphasizing planning, organization, rating of employees and procedures to develop good morale. Introduction to interpretation of case studies. Restricted to: Community Colleges only.

**BMGT 150. Income Taxation.. . . . . (3 cr.)**

Federal income taxation of individuals, sole proprietorships, partnerships, corporations, trusts, and estates with particular reference to CLU, life insurance and annuities. Restricted to: Community Colleges only.

**BMGT 160. Self-Presentation and Etiquette . . . . . (3 cr.)**

Introduction to business etiquette based on tradition, social expectations, and professional behavior standards. Restricted to: Community Colleges only.

**BMGT 175. Introduction to Business Finance.. . . . . (3 cr.)**

Understanding financial systems and the methods businesses use to acquire and use resources is an important tool for the managers. This course provides an overview of the financial inner workings of businesses and corporations. Restricted to: Community Colleges only.

**BMGT 201. Work Readiness and Preparation . . . . . (2 cr.)**

Instruction in methods of selection, seeking, acquiring and retaining employment. Addresses work success skills, business etiquette, employer expectation and workplace norms. Restricted to: Community Colleges only.

**BMGT 210. Marketing .. . . . . (3 cr.)**

Role of marketing in economy, types of markets, product development, distribution channels, pricing, promotion of goods, market research, consumer motivation, and management of marketing process.

Prerequisite(s): BMGT 110. Restricted to: Community Colleges only.

**BMGT 211. Marketing for Bankers.. . . . . (3 cr.)**  
Concepts and philosophies of marketing; information, research, target, the marketing mix, and market planning. Prerequisite(s): BMGT 112. Restricted to: Community Colleges only.

**BMGT 212. Supervisory and Leadership Trends. . . . . (3 cr.)**  
Current trends in marketing, merchandising, sales promotion and management; in manufacturing, merchandising and service types of businesses. Extensive use of practical student project. Prerequisite(s): BMGT 110 or BUSA 111. Restricted to Community Colleges only.

**BMGT 213. Consumer Lending. . . . . (3 cr.)**  
Principles of credit evaluation, types of credit, marketing, collections, legal aspects, installment lending, leasing management, insurance, and rate structure and yields. Prerequisite(s): BMGT 112. Restricted to: Community Colleges only.

**BMGT 221. Internship I. . . . . (1-3 cr.)**  
Student employed in approved work site; supervised and rated by employer and instructor. Each credit requires specified number of hours of on-the-job work experience. Consent of instructor required. Graded: S/U. Restricted to: Community Colleges only. Restricted to BMGT majors.

**BMGT 225. Introduction to Commercial Lending .. . . . (3 cr.)**  
Commercial lending overview, the lending process, portfolio management, and regulation and business development. Prerequisite(s): BMGT 112. Restricted Community Colleges only.

**BMGT 231. Legal Issues in Business . . . . . (3 cr.)**  
Application of fundamental legal principles to business transactions. Sources, functions, and objectives of law, including federal and New Mexico court systems and procedures, criminal law, torts, contracts, and sales, and Uniform Commercial Code. Restricted to: Community Colleges only.

**BMGT 240. Human Relations .. . . . (3 cr.)**  
Human interactions in business and industrial settings. Motivation and learning experiences as related to problems of the worker and supervisor. Practical applications of human behavior. Prerequisite(s): CCDE 105N or higher or BOT 105 or higher. Restricted to: Community Colleges only.

**BMGT 248. Introduction to Quality Management. . . . . (3 cr.)**  
Introductory practices of total quality management practices aimed at all levels of an organization to continually improve performance to include competitiveness in today's business world. Restricted to: Community Colleges only.

**BMGT 250. Diversity in the Workplace. . . . . (3 cr.)**  
Concepts of culture, diversity, prejudice, and discrimination within the domestic workforce/society. Prerequisite(s): BMGT 110. Restricted to: Community Colleges only.

**BMGT 277. Small Business Management . . . . . (3 cr.)**  
Study of the principles, advantages, and problems of owning or operating a small business. Location, capital, marketing, control, and sales promotion. Prerequisite(s): BMGT 110. Restricted to: Community Colleges only.

**BMGT 280. Introduction to Human Resources .. . . . (3 cr.)**  
Personnel functions encompassing job analysis, recruitment, selection, training, appraisals, discipline, and terminations. Prerequisite(s): BMGT 110. Restricted to: Community Colleges only.

**BMGT 282. Intro to International Business Mgmt. . . . . (3 cr.)**  
Overview of the social, economic and cultural environment of international business transactions. Prerequisite(s): BMGT 110 or BUSA 111. Restricted to Community Colleges only.

**BMGT 285. Intro to Manufacturing Operations.. . . . (3 cr.)**  
Introduction to issues related to manufacturing, including an overview of the production function, product design and development, location, layout, forecasting, planning, purchasing, materials/inventory, and quality management. Prerequisite(s): BMGT 110 and BMGT 140. Restricted to: Community Colleges only.

**BMGT 286. Introduction to Logistics .. . . . (3 cr.)**  
Overview on the planning, organizing, and controlling of transportation, inventory maintenance, order processing, purchasing, warehousing, materials, handling, packaging, customer service standards, and product scheduling. Restricted to: Community Colleges only.

**BMGT 287. Introduction to Export/Import.. . . . (3 cr.)**  
Procedures and documentation for exporting and importing products. Emphasis on NAFTA regulations and other U.S. border operations crossings. Prerequisite(s): BMGT 110 or BUSA 111. Restricted to Community Colleges only.

**BMGT 290. Applied Business Capstone . . . . . (3 cr.)**  
Refines skills and validates courses taken in BMGT program. Business simulations, case studies and projects used to test and improve business practices. Student must be within 25 credits of graduation. Prerequisite(s): BMGT 110, BMGT 140, and BMGT 240. Restricted to: Community Colleges only.

**BOT - BUSINESS OFFICE TECHNOLOGY**

**BOT 101. Keyboarding Basics .. . . . (3 cr.)**  
Covers correct fingering and mastery of the keyboard to develop skillful operation. Formatting basic business letters, memos, and manuscripts.

**BOT 102. Keyboarding: Document Formatting .. . . . (3 cr.)**  
Designed to improve keyboarding speed and accuracy; introduce formats of letters, tables and reports. A speed and accuracy competency requirement must be met. Prerequisite: BOT 101 or consent of instructor.

**BOT 105. Business English I.. . . . (3 cr.)**  
Training and application of the fundamentals of basic grammar, capitalization and sentence structure (syntax).

**BOT 106. Business Mathematics.. . . . (3 cr.)**  
Mathematical applications for business, including training in the touch method of the 10-key calculator. Prerequisite: CCDM 103N or adequate score on math placement exam.

**BOT 110. Records Management .. . . . (3 cr.)**  
Principles, methods and procedures for the selection, operation and

control of manual and automated records systems.

**BOT 120. Accounting Procedures I. . . . . (3 cr.)**

Business accounting principles and procedures. Use of special journals, cash control, and merchandising concepts. Reports for sole proprietorships.

**BOT 150. Medical Terminology .. . . . (3 cr.)**

Understanding of the basic elements of medical words. Use of medical abbreviations. Same as NURS 150 and OEHO 120.

**BOT 202. Keyboarding Document Production. . . . . (3 cr.)**

Further development of keyboarding speed and accuracy. Production of complex letters, memos, tables, reports and business forms. A speed and accuracy competency requirement must be met. Prerequisites: BOT 102 and BOT 109, or consent of instructor.

**BOT 203. Office Equipment and Procedures I. . . . . (3 cr.)**

Office organization, telephone techniques, equipment and supplies, handling meetings, human relations, mail procedures, and travel. Prerequisites: BOT 213 or C S 110G or consent of instructor.

**BOT 207. Machine Transcription. . . . . (3 cr.)**

Creating office documents using transcribing equipment and micro-computer software. Emphasis on proofreading, editing and grammar. Prerequisites: minimum keyboarding of 45 wpm and C or better in BOT 105 or BOT 109 or equivalent and BOT 211 or BOT 213.

**BOT 208. Medical Office Procedures. . . . . (3 cr.)**

Records and procedures as applicable to medical offices. Prerequisites: BOT 109, BOT 211, and AHS 120.

**BOT 209. Business and Tech. Communications . . . . . (3 cr.)**

Effective written communication skills and techniques for career success in the work place. Composition of letters, memos, short reports, forms, and proposals, and technical descriptions and directions. Prerequisites: ENGL 111G and computer keyboarding ability or consent of instructor.

**BOT 211. Information Processing I. . . . . (3 cr.)**

Defining and applying fundamental information processing concepts and techniques using the current version of leading software. Prerequisite(s): BOT 101 or consent of instructor. Restricted to Community Colleges only.

**BOT 217. PowerPoint Presentation . . . . . (3 cr.)**

Comprehensive, hands-on approach to learning and applying basic and advanced features of PowerPoint. These include text enhancements, objects, fills, colors, animation, charts, sound, video, and hyperlinks. Students demonstrate appropriate audience and communication tools to deliver presentations. Prerequisites: BOT 211 or ability to demonstrate keyboarding and Windows proficiency.

**BOT 221. Internship .. . . . (1-3 cr.)**

Work experience that directly relates to a student's major field of study that provides the student an opportunity to explore career paths and apply knowledge and theory learned in the classroom. Internships may be paid or unpaid. Students are supervised/evaluated by both the employer and the instructor. May be repeated up to 6 credits. Consent of Instructor required. Restricted to BOT HIT majors. S/U Grading (S/U, Audit). Restricted to: Community Colleges only.

**BOT 223. Medical Transcription I . . . . . (3 cr.)**

Introductory machine transcription for the medical office using medical terminology. Prerequisite(s): (BOT 150 or HIT 150 or AHS 120) and (BIOL 101 G/L or AHS 100). Restricted to: Community Colleges only.

**BOT 228. Medical Insurance Billing. . . . . (3 cr.)**

Overview of the insurance specialists' role and responsibilities. Emphasis on diagnostic and procedural coding and the claims processing cycle. Prerequisite: NURS 150 or OEHO 120 or BOT 150 and OEHO 100 or BIOL 101G/L and BOT 208 or consent of instructor. May be repeated for a maximum of 6 credits.

**BOT 239. Personal Development. . . . . (3 cr.)**

Development of a marketable, employable office systems person, to include interview, voice, manners, and apparel.

**BOT 240. Intro to Individual Taxation. . . . . (3 cr.)**

Overview of Individual Federal Taxation; awareness of tax problems pitfalls and planning opportunities; focus on individual personal financial concerns and tax planning. One semester of accounting principles/procedures is recommended.

**BOT 255. Special Topics .. . . . (1-4 cr.)**

Specific subjects to be announced in the Schedule of Classes.

**BOT 268. Health Information Systems . . . . . (3 cr.)**

Applications of systems and policies to health information systems, functions and health care data requests such as administrative, patient registration, personal health record (PHR), lab, radiology, pharmacy, etc. Prerequisite(s): OECS 105 or C S 110; AND BOT 208. Restricted to: Community Colleges only.

**BUSA - BUSINESS ADMINISTRATION AND ECONOMICS**

**BUSA 111. Business in a Global Society . . . . . (3 cr.)**

Overview of the global environment of business and the development of business as an integrative, cross-disciplinary activity.

**C E - CIVIL ENGINEERING**

**C E 109. Computer Drafting Fundamentals . . . . . (3 cr.)**

Same as DRFT 109, E T 109, SUR 109.

**C E 233. Mechanics-Statics. . . . . (3 cr.)**

Engineering mechanics using vector methods. Prerequisites: MATH 192G and cumulative GPA of 2.0. Corequisite: PHYS 215G.

**C EP - COUNSELING & EDUCATIONAL PSYCHOLOGY**

**C EP 110G. Human Growth and Behavior . . . . . (3 cr.)**

Introduction to the principles of human growth and development throughout the life span.

**C EP 210. Educational Psychology. . . . . (3 cr.)**

Psychological foundations as they apply to the learner in the classroom setting.

## C J - CRIMINAL JUSTICE

- CJ 101G. Introduction to Criminal Justice** . . . . . (3 cr.)  
Examination of crime and justice within the broader social and cultural context of U.S. society from interdisciplinary social science perspectives. Includes critical analysis of criminal justice processes and the ethical, legal, and political factors affecting the exercise of discretion by criminal justice professionals.
- CJ 199. Special Topics in Criminal Justice** . . . . . (1-3 cr.)  
Specific subjects to be announced in the Schedule of Classes. May be repeated under different topics for a maximum of 6 credits.
- CJ 205. Criminal Law I** . . . . . (3 cr.)  
Rules, principles, and doctrines of criminal liability in the United States. The historical development, limits, and functions of the substantive criminal law.
- CJ 210. The American Law Enforcement System** . . . . . (3 cr.)  
Historical and philosophical foundations of law and order. An in-depth examination of the various local, state, and federal law enforcement agencies.
- CJ 230. Introduction to Corrections** . . . . . (3 cr.)  
Development of correctional philosophy, theory, and practice. Instructional and non-institutional alternatives available in the corrections process.
- CJ 250. Courts and the Criminal Justice System** . . . . . (3 cr.)  
Structures and functions of American courts. Roles of attorneys, judges, and other court personnel; operation of petit and grand juries, trial and appellate courts.
- CJ 293. Field Experience in Criminal Justice** . . . . . (3-6 cr.)  
Field experience in a public criminal justice agency or equivalent private sector organization. Supervised internship experience, conferences, and observations. Prerequisites: CJ 101G, prior arrangement and consent of instructor and a GPA of 2.0 or better in major. Restricted to majors. Community Colleges only.

## C S - COMPUTER SCIENCE

- C S 110. Computer Literacy** . . . . . (3 cr.)  
Evolution and application of computers; economic and social implications; introduction to programming on microcomputers.
- C S 177. C++ Programming** . . . . . (3 cr.)  
Introduction to object-oriented programming in the C++ language. Prerequisite(s): MATH 120 or higher.
- C S 209. Special Topics** . . . . . (1-3 cr.)  
May be repeated for a maximum of 12 credits.

## CCDE - DEVELOPMENTAL ENGLISH

- CCDE 105 N. Effective Communication Skills** . . . . . (4 cr.)  
Instruction and practice in basic communication, to include written and oral presentations. Develops thinking, writing, speaking, reading, and listening skills necessary for successful entry to college and university

classes. Provides laboratory. RR applicable.

- CCDE 110 N. General Composition** . . . . . (4 cr.)  
Instruction and practice in preparation for college-level writing. Students will develop and write short essays. Provides laboratory. Prerequisite: CCDE 105N (C or better) or equivalent. RR applicable.

## CCDM - DEVELOPMENTAL MATH

- CCDM 100 N. Math Prep for College Success** . . . . . (1-4 cr.)  
Mathematics skills course designed for college students with math skills insufficient for success in CCDM 103N. May be repeated for a maximum of 4 credits. RR applicable.
- CCDM 103 N. Pre-Algebra** . . . . . (4 cr.)  
Fundamental mathematics operations and arithmetic computations. Introduction to algebra and applied geometry. Provides laboratory and individualized instruction. RR applicable.
- CCDM 105 N. Mathematics Prep and Pre-Algebra** . . . . . (5 cr.)  
A total immersion course that combines CCDM 100N and CCDM 103N using tutorials, manipulatives, and classroom instruction. Completion of this class is equivalent to the completion of CCDM 100N and CCDM 103N. Prerequisite(s): Math Placement Exam. Restricted to: Community Colleges only.
- CCDM 112 N. Developmental Algebra I** . . . . . (4 cr.)  
Fundamental algebra operations, algebraic expressions, solving linear equations, systems of equations and application of linear equations. Provides laboratory instruction. Completion of CCDM 112N and CCDM 113N is equivalent to completion of CCDM 114N. Graded: Traditional with RR. Prerequisite(s): Grade of C or better in CCDM 103N or equivalent. Restricted to: Community Colleges only.
- CCDM 113 N. Developmental Algebra II** . . . . . (4 cr.)  
Fundamental algebra operations, polynomials, factoring, solving quadratics by factoring, rational expressions, exponents and radical expressions (continuation of CCDM 112N). Provides laboratory instruction. Completion of CCDM 112N and CCDM 113N is equivalent to completion of CCDM 114N. Graded: Traditional with RR. Prerequisite(s): Grade of C or better in CCDM 112N or consent of instructor. Restricted to: Community Colleges only.

- CCDM 114 N. Algebra Skills** . . . . . (4 cr.)  
Fundamental algebra operations: algebraic expressions, solving linear equations, factoring, radicals, exponents. Provides laboratory and individualized instruction. Completion of CCDM 114N meets basic skills requirement. Graded: Traditional with RR. Prerequisite(s): C or better in CCDM 103N. Restricted to: Community Colleges only.

## CCDR DEVELOPMENTAL READING

- CCDR 101 N. Introduction to Basic Reading** . . . . . (4 cr.)  
Provides basic reading skills through comprehension and vocabulary development. Emphasis on oral language literacy and reading fluency. Course earns institutional credit but will not count toward degree requirements. Prerequisite: COMPASS score of below 42 on Reading section.

**CCDR 103 N. Comp Reading Development . . . . . (4 cr.)**

Provides integration of basic reading skills, including vocabulary development, text comprehension, and critical reading skills. Course earns institutional credit but will not count towards degree requirements. Prerequisite: COMPASS score of 43 to 59 on reading section.

**CCDR 105 N. Fundamentals of Academic Reading . . . (3 cr.)**

Fundamentals of academic reading skills. Emphasis on vocabulary development and text comprehension through literature based instruction. Course earns institutional credit but will not count towards degree requirements. Graded: Traditional with RR. Prerequisite(s): COMPASS score 60 on reading section. Restricted to: Community Colleges only.

**CCDR 110 N. Effective College Reading . . . . . (3 cr.)**

Provides a variety of strategies for effective reading and studying at the college level. Emphasis on reading across disciplines. Course earns institutional credit but will not count towards degree requirements. Graded: Traditional with RR. Prerequisite(s): COMPASS score 64 on reading section. Restricted to: Community Colleges only.

**CCDS - DEVELOPMENTAL SKILLS****CCDS 109 N. Study Skills for Reading . . . . . (1-3 cr.)**

Individualized reading skill strategies necessary for success in college classroom. May be repeated for a maximum of 3 credits. Graded traditional or S/U.

**CCDS 111 N. Study Skills for Math . . . . . (1-3 cr.)**

Individualized study skill strategies necessary for success in the math classroom. May be repeated for a maximum of 3 credits.

**CCDS 113 N. Study Skills for English . . . . . (1-3 cr.)**

Individualized study skill strategies necessary for success in the composition classroom. May be repeated for a maximum of 3 credits.

**CHEF – CULINARY ARTS****CHEF 211. Food Production Management I . . . . . (3 cr.)**

Introduction to kitchen design, workflow, and commercial equipment. Techniques, methods, and application of basic food production principles. Practical experience in cooking processes from a managerial viewpoint. Crosslisted with: HOST 211. Restricted to Community Colleges only.

**CHEF 214. Bakery Management II . . . . . (3 cr.)**

Advanced techniques and management of bakery operations are explored. Students learn classical forms and techniques. Modern methods of preparing traditional pastry and baked goods are introduced. Crosslisted with: HOST 218. Prerequisite(s): CHEF 211 or consent of instructor. Restricted to Community Colleges only.

**CHEF 234. Culinary Arts Fundamentals II . . . . . (4 cr.)**

Continuation of introductory course focusing on meat cookery, daughter sauces, cold food preparation, poultry and seafood. Safe use of equipment is emphasized while experiencing differing methods of preparation and cooking. Preparation and production of food products integral to service of guests is incorporated in this course. Prerequisite(s): CHEF 233. Restricted to: CHEF & HOST majors. Restricted to Community Colleges only.

**CHEF 240. Baking Fundamentals . . . . . (4 cr.)**

Introduction to baking techniques, measurement and use of ingredients; equipment use and chemical reactions inherent in the baking process. Production of simple desserts and baked goods. Introduction to working with bread dough. Prerequisite(s): CHEF 234. Restricted to: CHEF & HOST majors. Community Colleges only.

**CHEM - CHEMISTRY****CHEM 110G. Principles and Applications of Chem. . . . (4 cr.)**

A survey of the properties and uses of the elements and their compounds. In addition to classical chemistry, attention is paid to the materials from which consumer products are made, to the production of energy, and to environmental considerations. Prerequisite: 3 years of high school math or CCDM 114N.

**CHEM 111G. General Chemistry I . . . . . (4 cr.)**

Descriptive and theoretical chemistry. Prerequisite: (1) grade of C or better in MATH 120 or a Mathematics Placement Exam Score adequate to enroll in mathematics courses beyond MATH 120; and (2) one of the following: B or better in a second semester high school chemistry course, or grade of at least C in CHEM 100, or an enhanced ACT score of at least 22. CHEM 111G/112 are General Education alternative to CHEM 110G.

**CHEM 112G. General Chemistry II . . . . . (4 cr.)**

Descriptive and theoretical chemistry. CHEM 111G/112G are General Education alternative to CHEM 110G. Prerequisite(s): CHEM 111G.

**CHEM 211. Organic Chemistry . . . . . (4 cr.)**

A one-semester survey for students requiring a brief coverage of important classes of organic compounds. Prerequisite: CHEM 112G or CHEM 114.

**CHEM 251. Special Topics in Chemistry . . . . . (1-6 cr.)**

Specific subjects in Chemistry. These subjects will be announced in the 'Schedule of Classes'. It may be repeated under different topics for a maximum of 12 credits.

**CHIN – CHINESE****CHIN 111. Elementary Chinese I . . . . . (4 cr.)**

Mandarin Chinese for beginners.

**CHIN 112. Elementary Chinese II . . . . . (4 cr.)**

Mandarin Chinese for beginners. Prerequisite: C or better in CHIN 111.

**CMT - CREATIVE MEDIA TECHNOLOGY****CMT 115. Digital Photography and Imaging I . . . . . (3 cr.)**

Principles and techniques of photography using digital equipment with an emphasis on lighting, focus, and composition.

**CMT 126. Film Crew Training I . . . . . (9 cr.)**

This course was designed in collaboration with the NM IATSE Local 480 union and the NM Film Office and focuses on providing hands-on training for students wishing to work on film crews. The course will offer an overview of the primary below-the-line craft areas of film



production. Restricted to: Community Colleges only.

**CMT 130 – Introduction to Web Design . . . . . (3 cr.)**

Introduction to web development techniques, theory, and design. Incorporates HTML and industry-standard web editing software in developing various web sites. Restricted to: Community Colleges only.

**CMT 135. Introduction to 3D Computer Animation.. . . . (3 cr.)**

Learning to work in a 3D environment. Introduction to the basics of modeling, animation, dynamics, and rendering. Working with polygons, NURBS and subdivisions, and editing in multiple interfaces. May be repeated for a maximum of 6 credits.

**CMT 140. Print Media I . . . . . (3 cr.)**

Creation and design of publications and presentation materials using page layout software. May be repeated for a max 6 credits.

**CMT 142. Computer Illustration . . . . . (3 cr.)**

Preparation of digital graphics with a vector or draw program for use in print, web, video, animations, and multimedia. May be repeated for a maximum of 6 credits.

**CMT 145. Image Processing I . . . . . (3 cr.)**

Design and creation of digital graphics using a raster or bitmap program for use in print, multimedia, video, animation and web. May be repeated for a maximum of 6 credits.

**CMT 148. Digital Signage Systems.. . . . (3 cr.)**

A compare and contrast of different digital signage systems and the selection as needed for environment, lighting, and purpose. Topics cover resolution and network considerations, we well as the computer system and digital storage media for digital signage systems.

**CMT 150. 2D Animation . . . . . (3 cr.)**

Concepts and techniques in storyboarding and creating interactive 2D animations for web, multimedia and video. Prerequisites: CMT 142 or CMT 146.

**CMT 155. Selected Topics. . . . . (1-4 cr.)**

Specific titles to be announced in the Schedule of Classes. May be repeated for a maximum of 18 credits. Same as OEGR 155.

**CMT 160. Modeling and Animation . . . . . (3 cr.)**

Building on student's knowledge of 2D animation, covers modeling, animating objects and scenes in a 3D environment using various camera and lighting effects. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges only.

**CMT 170. History of Film: A Global Perspective . . . . . (3 cr.)**

Explores the history of cinema from the earliest 19th century developments to the present digital video revolution. Offers students a broader base of understanding of the tools and methodologies used in the craft.

**CMT 175. 3-D Character Design . . . . . (3 cr.)**

Focus on designing a character and then taking that design and building it in 3D using intermediate modeling techniques. Prerequisite: CMT 135 or CMT 160. May be repeated for a maximum of 6 credits.

**CMT 180. Design Principles . . . . . (3 cr.)**

Techniques and theories of design principles, including layout founda-

tions, logo building, type, color, and story-boarding and their application to print, web, animation and video. Prerequisite(s): CMT 142 or CMT 146. Restricted to: Community Colleges only.

**CMT 190. Digital Video Production I . . . . . (3 cr.)**

A hands-on study of the tools and techniques used to produce the independent video. Through the production of various short projects, the student explores how the ideas of the writer/director are translated into a visual story. May be repeated for a maximum of 6 credits.

**CMT 191. Digital Content Integration . . . . . (3 cr.)**

An overview of available prepackaged content for digital signage applications. Topics address the use of RSS feeds, widgets, and other pre-produced content in digital signage displays. Topics will also include file format conversion, both free and commercial.

**CMT 195. Digital Video Editing I . . . . . (3 cr.)**

A study of the basic tools and techniques of non-linear digital video editing. May be repeated for a maximum of 6 credits.

**CMT 205. Cinematography.. . . . (3 cr.)**

Theory and techniques of visual design in cinematography and the aesthetics of lighting. May be repeated for a maximum of 6 credits. Prerequisite(s): CMT 180 and CMT 190. Restricted to: Community Colleges only.

**CMT 206. Principles of Sound . . . . . (3 cr.)**

Study of soundtrack design theory, and the use of audio editing software that is compatible with media editing software to create soundtracks for different visual media. Pre/Corequisite(s): CMT 195. Restricted to: Community Colleges only.

**CMT 210. Digital Video Production II . . . . . (3 cr.)**

Advanced techniques of the tools and application of professional film making. Prerequisite: CMT 190. May be repeated for a maximum of 6 credits.

**CMT 215. Digital Video Editing II.. . . . (3 cr.)**

Advanced features of digital video, audio/music, and titling production software. Included are color correction, vector scopes, motion effects, and advanced editing techniques used by filmmakers. Prerequisite: CMT 195 or OEGR 210. May be repeated for a maximum of 6 credits. Same as OEGR 215.

**CMT 216. Digital Photography and Imaging II . . . . . (3 cr.)**

Provide understanding and skills needed for advanced digital capture, editing, optimizing and manipulating photographic images for print, web and multimedia applications. The course will prepare students to make more advanced technical and more refined aesthetic decisions relative to specific photographic applications. Prerequisite(s): CMT 115. Restricted to: Community Colleges

**CMT 220. Environmental Scene Design . . . . . (3 cr.)**

Modeling design techniques used to create environments and scenes for use in animated films and games. Investigation of both natural and architectural environments to be recreated in the virtual world. Prerequisite: CMT 135 or CMT 160.

**CMT 223. Media Production Services . . . . . (1-3 cr.)**

A design studio environment in which students obtain real-world experience while providing service to college and non-profit associates with

faculty supervision using a variety of media. Can be used with permission to fulfill cooperative requirement. Prerequisite: CMT 180 or ART 163. May be repeated for a maximum of 6 credits.

**CMT 226. Film Crew Cooperative Experience.. . . . . (3-6 cr.)**

Industry production experience in specific craft areas for film crew technicians who have successfully completed two semesters of FTTP. Prerequisite(s): CMT 156. Restricted to: Dona Ana campus, Carlsbad campus.

**CMT 227. Advanced Character Animation.. . . . . (3 cr.)**

Focus on complex rigging techniques as well as utilizing advanced animation functions to blend multiple animations into complex animations. May be repeated for a maximum of 6 credits. Prerequisite(s): CMT 160. Restricted to: Community Colleges only.

**CMT 230. Web Design II .. . . . . (3 cr.)**

Creating and managing well-designed, organized web sites using HTML and web development software. May be repeated for a maximum of 6 credits. Prerequisite(s): CMT 130. Restricted to: Community Colleges only. Cross-listed: OEGR 230

**CMT 236. Digital Audio Fundamentals . . . . . (3 cr.)**

Advanced digital audio post production and recording techniques using current entertainment industry-standard software and hardware. Restricted to: Community Colleges only.

**CMT 238. Digital Signage Content Management .. . . . (3 cr.)**

An overview of PC-based digital signage software for content management. Topics include proper selection of software based on client needs; software installation and management; digital content playlists and scheduling.

**CMT 239. Digital Content Mgmt. for Mobile Devices . . . (3 cr.)**

This course will cover mobile device content management such as uploading and scheduling for personal content delivery. Topics include the selection of content management software for mobile devices and the installation and hardware requirements for use, accepted practices for distribution of content on mobile devices.

**CMT 240. Print Media II .. . . . . (3 cr.)**

Refining of technical design skills using advanced features of page layout software in preparing a variety of business-related documents. Prerequisite: CMT 140 or OEGR 140. May be repeated for a maximum of 6 credits.

**CMT 242. Advanced Computer Illustration . . . . . (3 cr.)**

Advanced techniques in 2D vector drawing and fundamentals of 3D illustration for use in print, web, and multimedia applications. Prerequisite: CMT 142. May be repeated for a maximum of 6 credits. Same as OEGR 270.

**CMT 260. 3D Special Effects.. . . . . (3 cr.)**

Creating advanced virtual special effects for both rigid and soft bodies. Using MEL, dynamic principles, mixing nodes, and advanced particle systems. How to drive particles over surfaces, add texture to flow, create surface tensions, and use collision events to drive texture. Study of integrating computer-generated images with real-life video and audio. Prerequisite: CMT 160 or CMT 225.

**CMT 270. Digital Video Game Theory/Animation I . . . (3 cr.)**

Prepares students for creating 3-D animated graphics in gaming modalities. Provides foundation of skills in gaming development, branching and alternate scenarios. Extensive use of rendering and advanced software packages. Prerequisites: CMT 135 and CMT 142.

**CMT 271. Digital Video Game Theory/Animation II. . . (3 cr.)**

Continuation of CMT 270. Prerequisite: CMT 270.

**CMT 280. Interactive Design.. . . . . (3 cr.)**

Design and development of interactive multimedia projects such as gaming incorporating graphics, video, sound and animation. Prerequisites: CMT 150 or CMT 160. May be repeated for a maximum of 6 credits.

**CMT 290. Advanced 3d Animation Workshop A . . . . . (3 cr.)**

Program capstone. Students will utilize the skills learned in the program to produce their final animation. Group integrated projects are strongly recommended to emulate a real-work animation studio environment. Prerequisite: consent of instructor. Corequisite: CMT 291. May be repeated for a maximum of 9 credits.

**CMT 291. Advanced 3d Animation Workshop B.. . . . . (3 cr.)**

Program capstone. Students will utilize the skills learned in the program to produce their final animation. Group integrated projects are strongly recommended to emulate a real-work animation studio environment. Prerequisite: consent of instructor. Corequisite: CMT 290. May be repeated for a maximum of 9 credits.

**CMT 292. Creative Media Studio.. . . . . (3 cr.)**

A studio environment where students specialize in creating film- festival quality and portfolio-ready projects under the supervision of faculty. Prerequisites: CMT 190 and CMT 195 or CMT 160. May be repeated for a maximum of 6 credits.

**CMT 293. Advanced Digital Signage Content Mgmt. . . . (3 cr.)**

An overview of proprietary industry software used to manage digital content and perform content upload, playlist creation, and scheduling. Topics include proper selection of a commercial digital content management system based on client needs; installation and management; digital content playlists and scheduling.

**CMT 295. Prof. Portfolio Design and Dev... . . . . (1-3 cr.)**

Personalized design and creation of the student's professional portfolio including hard-copy, demo reel, and online. Prerequisite: consent of instructor. May be repeated for a maximum of 6 credits. Same as OEGR 280.

**COLL - COLLEGE STUDIES**

**COLL 101. College/Life Success . . . . . (1-3 cr.)**

Provides students with an opportunity to cultivate the skills, values, and attitudes necessary to become confident, capable students, and contributing community members. Topics include time management, memory techniques, relationships, health issues, money management, and college and community resources.

**COLL 155. Special Topics. . . . . (1-4 cr.)**

Covers specific study skills and critical thinking topics. Specific subtitles to be listed in the Schedule of Classes. May be repeated for a maximum of 8 credits.

## COMM - COMMUNICATION STUDIES

### COMM 253G. Public Speaking. . . . . (3 cr.)

Principles of effective public speaking, with emphasis on preparing and delivering well-organized, logical, and persuasive arguments adapted to different audiences.

### COMM 265G. Principles of Human Communication. . . . . (3 cr.)

Study and practice of interpersonal, small group, and presentational skills essential to effective social, business, and professional interaction.

## DRFT- DRAFTING

### DRFT 101. Intro. to Drafting & Design Technologies . . . (1 cr.)

Professional and student organizations associated with the Drafting and Design Technologies program, degree requirements, employment skills and work habits, and university and college policies and procedures will be explored. Students will be introduced to the current learning management system and career-readiness certification. Restricted to Community Colleges only.

### DRFT 105. Technical Drawing for Industry . . . . . (3 cr.)

Technical sketching, basic CAD, and interpretation of drawings with visualization, speed and accuracy highly emphasized. Areas of focus include various trades such as machine parts, welding, heating and cooling, and general building sketches/plan interpretation.

### DRFT 108. Drafting Concepts/Descriptive Geometry . . . (2 cr.)

Basic manual drafting skills, sketching, terminology and visualization. Graphical solutions utilizing applied concepts of space, planar, linear and point analyses. Metric and S.I. units introduced.

### DRFT 109. Computer Drafting Fundamentals . . . . . (3 cr.)

Introduction to computer-aided drafting. Principles and fundamentals of drafting using the latest version of AutoCAD software. Crosslisted with: C E 109 and E T 109

### DRFT 112. Draft Concepts/Computer Draft Fund. I . . . (4 cr.)

Basic drafting skills, terminology, and visualization. Introduction to principles and fundamentals of computer-aided drafting. Prerequisites: OECS 207, OECS 125 or consent of instructor. Same as E T 106.

### DRFT 113. Draft Concepts/Computer Draft Fund. II. . . (4 cr.)

Drafting for mechanical/industrial applications; machine part detailing, assemblies in orthographic, isometric, auxiliary, oblique, and sectional views. Two-dimensional AutoCAD with introduction to 3-D AutoCAD. Prerequisite: DRFT 112. Same as E T 216. Restricted to: Community Colleges only.

### DRFT 114. Introduction to Solid Modeling. . . . . (3 cr.)

Students will learn 3-D visualization, mechanical drafting, and dimensioning skills as solid modeling skills are developed. Working drawings, assembly models, and assembly drawings will be introduced. May be repeated for a maximum of 6 credits. Restricted to Community Colleges only.

### DRFT 118. Geometry for Drafting . . . . . (3 cr.)

Analysis and problem solving of related technical problems using measuring instruments and techniques with geometry and trigonometry. Prerequisite: CCDM 103N or CCDM 104N.

### DRFT 130. General Building Codes . . . . . (3 cr.)

Interpretation of the Building Code, local zoning codes, A.D.A. Standards and the Model Energy Code to study construction and design requirements and perform basic plan checking. Restricted to: Community Colleges only.

### DRFT 143. Civil Drafting Fundamentals . . . . . (3 cr.)

Introduction to drafting in the field of Civil Engineering. Drawings, projects, and terminologies related to topographic, contour drawings, plan and profiles, and street/highway layout. Crosslisted with: E T 143. Prerequisite(s): DRFT 109. Restricted to Community Colleges only.

### DRFT 151. Construction Principles and Print Reading .. (3 cr.)

Introduction to construction materials, methods, and basic cost estimating and print reading applicable in today's residential, commercial, and public works industry. Instruction by print reading and interpretation, field trips, and actual job-site visits and progress evaluation.

### DRFT 154. GIS Technology. . . . . (3 cr.)

Introduction to GIS and related data collecting and mapping techniques. National standards emphasized utilizing computer and web-based systems and peripherals. Prerequisite(s): DRFT 109. Restricted to: Community Colleges only.

### DRFT 160. Construction Take-Offs and Estimating. . . . (3 cr.)

Computing and compiling materials and labor estimates from working drawings using various techniques common in general building construction and in accordance with standard specifications and estimating formats. Use of spreadsheets and estimating software introduced. Prerequisite: DRFT 151.

### DRFT 176. Solid Modeling, Rendering & Animation . . . (3 cr.)

Introduction to three dimensional drafting and solid modeling, rendering and animation for architecture and engineering fields. Material application, mapping, and scene lighting will be introduced. Prerequisite(s): DRFT 109. Restricted to: Community Colleges only.

### DRFT 177. Computer Rendering and Animation I. . . . . (3 cr.)

Introduction to technical applications of computer generated renderings and animations for the architecture and engineering fields. 3D models, photo-realistic renderings, and basic animation movie files will be produced utilizing Autodesk VIZ and Google SketchUp software. May be repeated for a maximum of 6 credits. Prerequisite: DRFT 109.

### DRFT 180. Residential Drafting . . . . . (3 cr.)

Basic residential drafting including, floor plans, foundation plans, sections, roof plans, exterior and interior elevations, and site plans. Applicable residential building and zoning codes, construction methods and materials, adaptable residential design, and drawing and sheet layout for architectural drafting will be introduced.

### DRFT 181. Commercial Drafting. . . . . (3 cr.)

Drafting principles, plan coordination, and code analysis applicable in the development of working drawings for commercial, public, and industrial building projects. Students will utilize National Cad Standards, ADA Standards, and will be introduced to modern office practice. Prerequisite(s): DRFT 109. Pre/Corequisite(s): DRFT 180. Restricted to: Community Colleges only.

### DRFT 190. Finding and Maintaining Employment . . . . (2 cr.)

Techniques in self-evaluations, resume writing, application completion,

job interviewing, and job retention. Exposure to work ethics, employee attitudes, and employer expectations.

**DRFT 214. Advanced Solid Modeling . . . . . (3 cr.)**

Advanced mechanical drafting/solid modeling techniques and topics will be studied using the student's software(s) of choice. Students will use any of the 3-D solid modeling software packages that are available on campus as they develop these skills, as well as develop a thorough working knowledge of the use of GDT in Mechanical Drafting/Solid Modeling. Detailed class projects will be assigned, and presentations will be required. May be repeated for a maximum of 6 credits. Prerequisite(s): DRT 114 or DRFT 176. Restricted to: Community Colleges only.

**DRFT 230. Building Systems Drafting.. . . . . (3 cr.)**

Development of working drawings for electrical, plumbing, and HVAC systems, for residential and commercial building through the applications of both 2D Drafting and 3D Building Information Modeling (BIM) techniques. Basics of project setup, National CAD Standards, ADA Standards, modern office practice, code analysis, as well as Sustainability and LEED for new construction. Prerequisite(s): DRFT 180 or DRFT 181. Restricted to: Community Colleges only.

**DRFT 240. Structural Systems Drafting . . . . . (3 cr.)**

Study of foundations, wall systems, floor systems and roof systems in residential, commercial and industrial design/construction. Produce structural drawings including foundation plans, wall and building sections, floor and roof framing plans, shop drawings and details; schedules, materials lists and specifications. Use of various software. Prerequisite(s): DRFT 180 or DRFT 181. Restricted to: Community Colleges only.

**DRFT 270 Architect Sketching and Render . . . . . (3 cr.)**

Use of freehand sketching, shading and shadowing techniques, 3-D models and 1-point and 2-point perspectives in the development of architectural presentation drawings. Prerequisite: DRFT 108.

**DRFT 277. Computer Rendering and Animation II.. . . . (3 cr.)**

Continuation of DRFT 276. Covers advanced modeling and animation techniques using 3-D animation software. Prerequisite: DRFT 276.

**DRFT 288. Portfolio Development.. . . . . (0-3 cr.)**

Production of a portfolio consisting of previously produced student work related to the student's individualized degree option. Process shall include the compilation and organization of working and presentation drawings, construction documents, BIM Models, and renderings/animations. Students will learn the basics of design layout and online portfolio documentation. Job search and resume preparation activities will also be required. Production of new material and content may also be required. This course is designed as a last semester course in the Drafting & Design curricula. Crosslisted with: ARCT 288. Restricted to: Community Colleges only.

**E E – ELECTRICAL AND COMPUTER ENGINEERING**

**E E 161. Computer Aided Problem Solving. . . . . (4 cr.)**

Introduction to scientific programming. Extensive practice in writing programs to solve engineering problems. Items covered will include: loops, input and output, functions, decision statements, and pointers. Pre/Corequisite(s): MATH 190G.

**E E 162. Digital Circuit Design . . . . . (4 cr.)**

Design of combinational logic circuits based on Boolean algebra. Introduction to state machine design. Implementation of digital projects with hardware description language. Prerequisite(s): C or better in E E 161 and Math 190.

**E E 210. Engineering Analysis I.. . . . . (4 cr.)**

The application of linear algebra and matrices, probability, random variables and random processes to solve problems in electrical engineering. Applications to be covered include probabilistic modeling of electrical/electronic systems and an introduction to Matlab. Prerequisite(s): C or better in E E 161 and MATH 192G.

**E E 260. Embedded Systems.. . . . . (4 cr.)**

Applications of microcontrollers, FPGAs, interfaces and sensors. Introduction to Assembly language programming. Prerequisite(s): C or better in E E 162.

**E E 280. DC and AC Circuits.. . . . . (4 cr.)**

Electric component descriptions and equations; Kirchhoff's voltage and current laws; formulation and solution of network equations for dc circuits; ideal op-amp circuits. Complete solutions of RLC circuits; steady-state analysis of ac circuits, ac power; introduction to frequency response techniques. Prerequisite(s): C or better in MATH 192 and PHYS 216.

**E S - ENVIRONMENTAL SCIENCE**

**E S 110G. Introductory Environmental Science . . . . . (4 cr.)**

Introduction to environmental science as related to the protection, remediation, and sustainability of land, air, water, and food resources. Emphasis on the use of the scientific method and critical thinking skills in understanding environmental issues.

**E T - ENGINEERING TECHNOLOGY**

**E T 104. Soldering Techniques . . . . . (1 cr.)**

Fundamentals of soldering, desoldering, and quality inspection of printed circuit boards.

**E T 106. Draft Concepts/Computer Draft Fund I.. . . . (4 cr.)**

Basic drafting skills, terminology, and visualization. Introduction to principles and fundamentals of computer-aided drafting. Prerequisite: OECS 125, OECS 207, or consent of instructor. Community Colleges only. Same as DRFT 112.

**E T 107. Intro to Materials Management . . . . . (3 cr.)**

The basics of production and inventory control, with overviews of forecasting, purchasing, physical inventory, inventory and warehouse management, and the elements of distribution including transportation, packaging and materials handling. Community Colleges only.

**E T 109. Computer Drafting Fundamentals . . . . . (3 cr.)**

Crosslisted with: DRFT 109, C E 109 and SUR 109

**E T 115. Introduction to Environmental Tech . . . . . (3 cr.)**

Provides an introduction to the fields of environmental science and environmental engineering. Includes engineering aspects of current

environmental issues and the effects of pollution on local, state, national and worldwide scales. Required for all advanced hazardous materials courses. Corequisite: either MATH 120 or high school chemistry, or CHEM 110G.

**E T 116. Industrial Processes . . . . . (2 cr.)**

Manufacturing processes with projects in welding, foundry and sheet metal. Corequisites: E T 106 and MATH 120.

**E T 120. Computation Software . . . . . (2 cr.)**

The use of spreadsheet software in the field of engineering technology.

**E T 121. Applied Radiation Technology . . . . . (3 cr.)**

Introduction to atomic and nuclear structure, radioactivity, radiation effects, and detection and measurement techniques. Required for all advanced radioactive materials courses. Prerequisite: MATH 120. Corequisite: PHYS 211G.

**E T 125. Introduction to Renewable Energy . . . . . (3 cr.)**

Renewable energy systems, including topics in thermal-solar photovoltaic, wind, geothermal systems, and other current topics. Theory, practical applications, safety considerations and the economics of alternative renewable energy systems compared to conventional systems.

**E T 126. Fundamentals of Solar Energy . . . . . (3 cr.)**

Solar energy technologies, including topics in passive, solar thermal and photovoltaic systems. Theory, practical applications, safety considerations and the economics of solar renewable energy systems compared to conventional systems.

**E T 127. Fundamentals of Wind Energy . . . . . (3 cr.)**

Wind energy technologies, including wind thermal systems. Theory, practical applications, safety considerations, and the economics of wind renewable energy systems. Students will be introduced to hands-on trainers. Restricted to: Carlsbad campus only.

**E T 142. Energy Auditor Techniques . . . . . (4 cr.)**

Hands-on course that will teach you how to conduct a detailed home energy audit. You will learn to identify the common energy wasting areas of a residence. You will also learn more in-depth energy conservation techniques.

**E T 153. Introduction to Computer Networks . . . . . (3 cr.)**

Introduction to basic computer network fundamentals including International Open Systems Interconnect (OSI), the seven-layer model, and various networking hardware devices. Community Colleges only.

**E T 155. Network Operating Systems I . . . . . (3 cr.)**

Introduction to a computer network operating system. May not be used as part of an E T degree program on main campus. Prerequisite(s): E T 120 or E T 122. Restricted to: Community Colleges only.

**E T 182. Digital Logic . . . . . (3 cr.)**

The use of truth tables, Boolean equations, and diagrams to define, simplify, and implement logic-valued functions.

**E T 183 L. Applied DC Circuits Lab . . . . . (1 cr.)**

Laboratory to accompany E T 183. Corequisite: E T 183.

**E T 183. Applied DC Circuits . . . . . (3 cr.)**

Application of Ohm's law, Kirchhoff's laws, Thevenin's, and Norton's

theorems to the analysis of DC passive circuits. Corequisite(s): MATH 120G.

**E T 184 L. Applied AC Circuits Lab . . . . . (1 cr.)**

Laboratory to accompany E T 184. Corequisite: E T 184.

**E T 184. Applied AC Circuits . . . . . (3 cr.)**

Application of circuit laws and theorems to analysis of AC passive circuits. Resonant circuit, polyphase circuit and magnetic circuit topics are introduced. Corequisite(s): MATH 121G. Prerequisite(s): E T 183.

**E T 190. Applied Circuits . . . . . (3 cr.)**

Application of Ohm's law, Kirchhoff's laws, and Thevenin's theorems to the analysis of AC and DC passive circuits. Electronic circuit topics are introduced. Pre/Corequisite(s): MATH 190G. Application of Ohm's law, Kirchhoff's law, and Thevenin's theorems to the analysis of AC and DC passive circuits. Electronic circuit topics are introduced. Pre/Corequisite(s): MATH 190G

**E T 191. Applied Circuits Laboratory . . . . . (1 cr.)**

Laboratory to accompany E T 190.

**E T 200. Special Topics . . . . . (1-3 cr.)**

Directed study or project. Prerequisite: consent of department head. May be repeated for a maximum of 6 credits.

**E T 202. Introduction to Instrumentation . . . . . (3 cr.)**

Introduction to sensors and transducers, signal conditioning and transmission for measurement and process control systems. Prerequisite: E T 183. Corequisite: E T 184. Community Colleges only.

**E T 204. Quality Assur & Metrology Lab . . . . . (3 cr.)**

Introduction to the importance of quality in products and services based on the criteria specified by ISO9000. Familiarization with the metrology laboratory equipment and applications including defining terms and explaining concepts. Hands-on learning of techniques for data collection, presentation, analysis and interpretation of statistical process control information. Prerequisites: MATH 121G. Community Colleges only.

**E T 211. Applied Radiation Detection . . . . . (4 cr.)**

Principles and methods used in the detection and measurement of ionizing radiation, gross detectional methods as well as radionuclide spectroscopy, statistics of counting. Prerequisite: E T 121.

**E T 215. Chemistry of Hazardous Materials . . . . . (3 cr.)**

Fundamental concepts of chemistry and its application to hazardous materials found in the workplace. Includes nature of matter and energy, inorganic and organic chemistry, physical and chemical properties of matter, acids, bases, and chemistry of toxic substances and flammables. Prerequisite: High school chemistry or C or better in CHEM 110. Corequisite: E T 115 and CHEM 111G.

**E T 216. Draft Conc./Comp Draft Fund II . . . . . (4 cr.)**

Drafting for mechanical/industrial applications, machine part detailing, and assemblies in orthographic, isometric, auxiliary, oblique and sectional views. Two-dimensional AutoCAD with introduction to 3-D AutoCAD. Prerequisite: E T 106. Community Colleges only. Same as DRFT 113.

- E T 217 L. Manufacturing Processes Lab** . . . . . (1 cr.)  
Laboratory to accompany E T 217. Corequisite: E T 217. Same as I E 217L.
- E T 217. Manufacturing Processes** . . . . . (3 cr.)  
Manufacturing methods and industrial processes which include casting, forming and machining. Introduction to the composition, fabrication, characteristics, and applications of industrial materials. Prerequisite: E T 110 and MATH 185. Corequisite: E T 217L. Same as I E 217.
- E T 220. Internship** . . . . . (1-6 cr.)  
Internship requiring an approved number of hours of varied and progressive experience in the field of study. The scope and other requirements of the internship are stated in an individualized syllabus and through a memorandum of understanding between the faculty mentor and the industry partner. Prerequisite; Consent of instructor. May be repeated for a maximum of 6 credits.
- E T 221. Applied Radiation Biology** . . . . . (2 cr.)  
Cell biology and effects of ionizing radiation on biological systems; acute, chronic and genetic effects of ionizing radiation on humans. Prerequisite: E T 121.
- E T 224. Project Plan, Implement & Control.** . . . . . (4 cr.)  
Integration of the production planning and control systems with production applications on the factory training floor, including continuous improvement techniques using the concepts of agility, lean manufacturing, focused factory, CNC, cells and flow manufacturing. Prerequisites: MATH 121G, ENGL 218G, ET 107, and ET 214. Community Colleges only.
- E T 234. Shop Floor Control Systems.** . . . . . (4 cr.)  
Inventory management techniques, plans, item level planning and control, physical inventory storage and handling, finished goods distribution, production order release, data collection and floor control, flow systems, JIT production, interfaces and implementation. Prerequisites: MATH 180 and MATH 121G. Community Colleges only.
- E T 246. Electronic Devices I.** . . . . . (4 cr.)  
Solid-state devices including diodes, bipolar-transistors, and field effect transistors. Use of these devices in rectifier circuits, small signal and power amplifiers. Prerequisite(s): (E T 190 and E T 191) or E T 184.
- E T 248. Basic Hydrogeology** . . . . . (3 cr.)  
Provides an overview of groundwater, its occurrence, distribution, movement and chemistry. Techniques used in evaluating hydrologic parameters such as hydraulic conductivity, storativity, and porosity. Prerequisite: MATH 120.
- E T 253. Networking Operating Systems II** . . . . . (3 cr.)  
Introduction to a computer network operating system. May not be used as part of an E T degree program on main campus. Prerequisite(s): E T 155. Restricted to Community Colleges campuses only.
- E T 261. Environmental Laws and regulations** . . . . . (3 cr.)  
Survey of federal and state regulations in waste management, workplace safety, and environmental protection. Students apply for regulations to simulated work conditions to gain a better understanding of regulations. Prerequisites: ET 115 and ENGL 111.
- E T 262. Software Technology I.** . . . . . (3 cr.)  
An introduction to computer programming concepts as applied to engineering technology. Includes basic logic design, algorithm development, debugging and documentation. History and use of computers and their impact on society. Satisfies general education computer science requirement. Prerequisite(s): E T 120 or E T 122.
- E T 271. Applied Radiation Protection.** . . . . . (3 cr.)  
Protection of human beings from the effects of ionizing radiation, dose determinations, regulations, engineering designs, environmental monitoring, and bioassay techniques. Prerequisites: E T 121.
- E T 272. Electronic Devices II** . . . . . (4 cr.)  
Differential amplifiers, operational amplifiers, positive and negative feedback, and computer-aided circuit analysis. Prerequisite(s): E T 246 and MATH 235.
- E T 273. Fund. of Networking Comm. I.** . . . . . (4 cr.)  
Introduction to networking basics, including computer hardware and software, electricity, networking terminology, protocols, LANs, WANs, OSI model, IP addressing, and design and documentation of basic network and structure cabling. Community Colleges only. Restricted to Community Colleges campuses only.
- E T 275. Environmental Monitoring** . . . . . (4 cr.)  
Environmental instrumentation and analytical techniques are explored in a hands-on introduction to the care and use of laboratory and field-portable instruments. Practice in the field in measuring environmental control parameters. Prerequisite: CHEM 110G.
- E T 276. Electronic Communications** . . . . . (3 cr.)  
Antennas, transmission devices, A-M and F-M transmission and detection, pulse systems, microwave systems. Prerequisite(s): E T 246.
- E T 277. Computer Networking I for IET** . . . . . (3 cr.)  
Computer network design and applications for LAN to WAN, protocols, switches, bridges, routers, NT server, TCP/IP networks, network diagnostics, voice over IP, wireless networks, and the OSI layers from physical to transport. Prerequisite(s): E T 182 and MATH 190G. Restricted to: IET majors. Restricted to Las Cruces campus only.
- E T 278. Fund. of Networking Communication III.** . . . . . (3 cr.)  
Introduction to switching and intermediate routing, including VLANs, spanning tree protocol, routing and routing protocols, security, and troubleshooting. Prerequisites: E T 277. Community Colleges only.
- E T 279. Fund. of Networking Communication IV** . . . . . (3 cr.)  
Introduction to WAN technology basics, including WAN devices; encapsulation formats; PPP components; session establishment; authentication; ISDN uses, services, and configuration; and frame-relay technology and configuration. Prerequisites: E T 278. Community Colleges only.
- E T 282. Digital Electronics.** . . . . . (4 cr.)  
Applications of digital integrated circuits, multiplexers, counters, arithmetic circuits, and microprocessors. Prerequisite(s): E T 182. Pre/Corequisite(s): E T 190 or E T 184.
- E T 283. Hardware PC Maintenance** . . . . . (3 cr.)  
Installing, configuring, troubleshooting, and maintaining personal computer hardware components. Prerequisite(s): E T 120 or E T 122.

**E T 284. Software PC Maintenance . . . . . (3 cr.)**  
Installing, configuring, troubleshooting, and maintaining personal computer operating systems. Prerequisite(s): E T 120 or E T 122.

**E T 297. Emergency Response to Haz Mat Incident . . . (3 cr.)**  
EPA approved Environmental Response Training Program Course 165.15. Intended for the members of hazardous materials response teams. Normally should be taken during last year of study.

**E T 298. Radioactive and Hazardous Waste Management(3 cr.)**  
Radioactive and hazardous waste management technologies such as elimination of waste streams, waste reduction, and waste recycling, treatment and disposal. Prerequisites: E T 115 and E T 121.

**ECED - EARLY CHILDHOOD EDUCATION**

**ECED 115. Child Growth, Dev. & Learning(3 cr.)**  
This basic course in the growth, development, and learning of young children, prenatal through age eight, provides students with the theoretical foundation for becoming competent early childhood professionals.

**ECED 125. Health, Safety, and Nutrition . . . . . (2 cr.)**  
This course provides information related to standards and practices that promote children's physical and mental wellbeing sound nutritional practices, and maintenance of safe learning environments.

**ECED 135. Family and Community Collaboration. . . . . (3 cr.)**  
This beginning course examines the involvement of families and communities from diverse cultural and linguistic backgrounds in early childhood programs. Ways to establishes collaborative relationships with families in early childhood settings is discussed. Prerequisite(s): ECED 115 and ENGL 111G.

**ECED 215. Curriculum Dev. Through Play . . . . . (3 cr.)**  
The beginning curriculum course places play at the center of curriculum in developmentally appropriate early childhood programs. It addresses content that is relevant for children birth through age four and developmentally and culturally sensitive ways of integrating content into teaching and learning experiences. Information on adapting content areas to meet the needs of children with diverse abilities and the development of IFSP's and IEP's is included. Consent of instructor required. Prerequisite(s): ECED 115 and ENGL 111G. Corequisite(s): ECED 220.

**ECED 220. Practicum for Curriculum Dev. . . . . (2 cr.)**  
The beginning practicum course will provide experiences that address curriculum content that is relevant for children birth through age four in developmentally and culturally sensitive ways. Consent of instructor required. Prerequisite(s): ECED 115 and ENGL 111G. Corequisite(s): ECED 215.

**ECED 225. Curr. Dev. & Implement (PreK-3rd Grade) .. (3 cr.)**  
The second curriculum course focuses on developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Development and implementation of curriculum in all content areas, including literacy, numeracy, the arts, health and emotional wellness, science, motor and social skills, is emphasized. Information on adapting content areas to meet the needs of children with diverse abilities and the development of IEP's is included. Consent of instructor required. Prerequisite(s): ECED 115, ENGL 111G. Corequisite(s):

ECED 230.

**ECED 230. Practicum for Curr. Dev & Impl. (PreK-3rd) (2 cr.)**  
The second field-based curriculum course focuses on practicing developmentally appropriate curriculum content in early childhood programs, age 3 through third grade. Consent of instructor required. Prerequisite(s): ECED 115, ENGL 111G,. Corequisite(s): ECED 225.

**ECED 235. Intro. to Language, Literacy and Reading .. (3 cr.)**  
This course is designed to prepare early childhood professionals for promoting children's emergent literacy and reading development. Through a developmental approach, the course addresses ways in which early childhood professionals can foster young children's oral language development, phonemic awareness, and literacy problem solving skills, fluency, vocabulary, and comprehension. Prerequisite(s): ECED 115 and ENGL 111G.

**ECED 245. Professionalism. . . . . (2 cr.)**  
This course provides a broad-based orientation to the field of early care and education. Early childhood history, philosophy, ethics and advocacy are introduced. Basic principles of early childhood systems are explored. Multiple perspectives on early care and education are introduced. Professional responsibilities such as cultural responsiveness and reflective practice are examined.

**ECED 255. Assess of Children & Eval. of Programs . . . (3 cr.)**  
This basic course familiarizes students with a variety of culturally appropriate assessment methods and instruments, including systematic observation of typically and non-typically developing children. Prerequisite(s): ECED 115 and ENGL 111G. Crosslisted with: SPED 255

**ECED 265. Guiding Young Children . . . . . (3 cr.)**  
This course explores various theories of child guidance and the practical applications of each. It provides developmentally appropriate methods for guiding children and effective strategies and suggestions for facilitating positive social interactions. Strategies for preventing challenging behaviors through the use of environment, routines and schedule will be presented.

**ECED 270. Program Management.. . . . (3 cr.)**  
Technical knowledge necessary to develop and maintain a quality early care and education program. The course will focus on sound financial management and vision, laws and legal issues that affect programs and state and national standards including accreditation requirements. Prerequisite: consent of instructor.

**ECED 275. Curr. for Diverse Learners and Their Families (3 cr.)**  
Implementation of family-centered programming that includes developmentally appropriate and culturally responsive curriculum. The course will also cover the establishment and maintenance of healthy and safe learning environments. Consent of instructor required.

**ECED 276. Eff. Prog. Dev. Diverse Learners & Their Fam. (2 cr.)**  
Practical experience in observing and carrying out the role of the director/administrator in the implementation of family-centered programming that includes individually appropriate and culturally responsive curriculum in a healthy and safe learning environment. Consent of instructor required. Corequisite(s): ECED 275. Restricted to ECED majors.

**ECED 280. Professional Relationships . . . . . (3 cr.)**

Development of staff relationships that will foster strong professional relationships with and among families, communities and advisory boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Working effectively with board, advisory groups and community members and agencies will be addressed. Consent of instructor required. Corequisite(s): ECED 281.

**ECED 281. Professional Relationships Practicum.. . . . (2 cr.)**

Practical experience in the development of staff relationship that will foster professional relationships with families, communities and boards. Issues of staff recruitment, retention, support and supervision will lay a foundation for positive personnel management. Consent of instructor required. Corequisite(s): ECED 280. Restricted to ECED majors.

**ECON - ECONOMICS**

**ECON 201G. Introduction to Economics . . . . . (3 cr.)**

Economic institutions and current issues with special emphasis on the American economy.

**ECON 251G. Principles of Macroeconomics . . . . . (3 cr.)**

Macroeconomic theory and public policy: national income concepts, unemployment, inflation, economic growth, and international payment problems. Prerequisite(s): Satisfaction of NMSU's mathematics basic skill requirement.

**ECON 252G. Principles of Microeconomics. . . . . (3 cr.)**

Microeconomic theory and public policy: supply and demand, theory of the firm, market allocation of resources, income distribution, competition and monopoly, governmental regulation of businesses and unions. Prerequisite(s): Satisfaction of NMSU's mathematics basic skill requirement.

**EDUC - EDUCATION**

**EDUC 168. Educational Uses of Computers. . . . . (2 cr.)**

Word processing, databases, spread sheets, telecommunication and curricular applications.

**EDUC 181. Field Experience I . . . . . (1 cr.)**

Introduction to public school teaching, school visits, classroom observations and discussion seminar.

**EDUC 195. Individual Topics in Education . . . . . (1-3 cr.)**

Supervised study in a specific area of interest. Each course shall be designated by a qualifying subtitle. May be repeated for a maximum of 9 credits.

**ELA – EDUCATIONAL LEADERSHIP & ADMINISTRATION**

**ELA 101. Freshman Orientation . . . . . (1 cr.)**

Introduction to the university and to the College of Education. Discussion of planning for individualized education program and field experience. Graded S/U.

**ELA 250. Introduction to Education.. . . . (2 cr.)**

An overview of the American education system with emphasis on organization, governance, law, demographics, and professional practice.

**ENGL - ENGLISH**

**ENGL 111G. Rhetoric and Composition . . . . . (4 cr.)**

Skills and methods used in writing university-level essays. Prerequisite(s): ACT standard score in English of 16 or higher or a Compass score 76 or higher; for those scoring 13-15 in English on the ACT or 35-75 on the Compass, successful completion of a developmental writing course; for those scoring 12 or below on the ACT standard score in English or 34 or below on the Compass, successful completion of two developmental writing courses.

**ENGL 115G. Perspectives on Literature . . . . . (3 cr.)**

Examines literature by writers from culturally diverse backgrounds and from different cultural and historical contexts. Explores various strategies of critical reading.

**ENGL 116G. Perspectives on Film . . . . . (3 cr.)**

Explores narrative and documentary film and examines significant developments in the history of cinema. Criticism of film as an art form, technical enterprise, business venture, and cultural phenomenon.

**ENGL 203G. Bus. & Prof. Communication . . . . . (3 cr.)**

Effective writing for courses and careers in business, law, government, and other professions. Strategies for researching and writing correspondence and reports, with an emphasis on understanding and responding to a variety of communication tasks with a strong purpose, clear organization, and vigorous professional style.

**ENGL 211G. Writing in the Humanities and Soc. Sci. . . . . (3 cr.)**

Theory and practice in interpreting texts from various disciplines in the humanities and social sciences. Strategies for researching, evaluating, constructing, and writing researched arguments. Course subtitled in the Schedule of Classes.

**ENGL 218G. Technical and Scientific Comm. . . . . (3 cr.)**

Effective writing for courses and careers in sciences, engineering, and agriculture. Strategies for understanding and presenting technical information for various purposes to various audiences.

**ENGL 220G. Introduction to Creative Writing . . . . . (3 cr.)**

Examines classic and contemporary literature in three genres. Various forms, terminologies, methods and technical aspects of each genre, and the art and processes of creative writing.

**ENGL 235. Narrative: Princ. of Story Across the Media (3 cr.)**

Examines the various strategies of written and visual storytelling, narrative structure and its principal components (plot, theme, character, imagery, symbolism, point of view) with an attempt to connect them to elements of contemporary forms of media expression, including screenwriting, playwriting, writing for documentaries and animation, etc. Crosslisted with: CMI 235

**ENGL 240. Introduction to Literature . . . . . (3 cr.)**

Intended primarily for non-English majors, course will introduce poetry, fiction, and drama from a variety of periods. There will be some introduction of critical terminology and some attention to writing about literary works of art.



**ENGL 244G. Literature and Culture.. . . . . (3 cr.)**

Intensive reading of and discussion and writing about selected masterpieces of world literature. Emphasizes cultural and historical contexts of readings to help students appreciate literary traditions. Core texts include works by Homer, Dante, and Shakespeare, a classic novel, an important non-Western work, and modern literature.

**ENGL 299. Special Topics .. . . . . (1-3 cr.)**

Emphasis on a literary and/or writing subject chosen for the semester. Repeatable for an unlimited credit under different subtitles.

**ENGR – ENGINEERING**

**ENGR 100. Introduction to Engineering. . . . . (3 cr.)**

An introduction to the various engineering disciplines, the engineering approach to problem solving, and the design process. Projects emphasize the importance of teamwork, written & oral communication skills, as well as ethical responsibilities.

**ENGR 111. Matlab Programming. . . . . (3 cr.)**

An introduction to the MATLAB computing environment. Emphasis on basic input/output and the programming skills needed to perform elementary data manipulation and analysis. Prerequisite(s): C S 110.

**ENGR 198. Special Topics in Engineering . . . . . (1-3 cr.)**

Directed individual study of topics in engineering. Written reports covering work required. Prerequisite: consent of academic dean. May be repeated for a maximum of 6 credits. Restricted to engineering majors. Graded S/U.

**FIN - FINANCE**

**FIN 206. Introduction to Finance .. . . . . (3 cr.)**

Theory and techniques of financial management for business firms. Includes application of financial analysis tools and techniques needed for business financial administration and decision making. Prerequisites: either ACCT 202 and ECON 251, or ECON 252 and MATH 120G, or consent of instructor. Community Colleges only. Examines classic and contemporary literature in three genres. Various forms, terminologies, methods and technical aspects of each genre, and the art and processes of creative writing.

**FIRE – FIRE SCIENCE**

**FIRE 112 Principles of Emergency Services . . . . . (3 cr.)**

This course provides an overview to fire protection and emergency services; career opportunities in fire protection and related fields; culture and history of emergency services; fire loss analysis; organization and function of public and private fire protection services; fire departments as part of local government; laws and regulations affecting the fire service; fire service nomenclature; specific fire protection functions; basic fire chemistry and physics; introduction to fire protection systems; introduction to fire strategy and tactics; life safety initiatives. Restricted to: Community colleges only.

**FIRE 114 Fire Behavior and Combustion .. . . . . (3 cr.)**

This course explores the theories and fundamentals of how and why fires start, spread, and are controlled. Restricted to: Community colleges only.

**FIRE 126 Fire Prevention.. . . . . (3 cr.)**

This course provides fundamental knowledge relating to the field of fire prevention. Topics include: history and philosophy of fire prevention; organization and operation of a fire prevention bureau; use and application of codes and standards; plans review, fire inspection; fire and life safety education; and fire investigation. Restricted to: Community colleges only.

**FIRE 127 Rescue Operations.. . . . . (3 cr.)**

A course designed to acquaint the student with the equipment and procedures employed in search and rescue operations to safely remove persons from burning structures, automobile accidents, and natural disasters. Prerequisite: consent of instructor. Restricted to majors.

**FIRE 128 Apparatus and Equipment . . . . . (3 cr.)**

Fire apparatus specifications design, construction features, performance factors, and field hydraulics as related to operation and maintenance. Prerequisite: MATH 115 or consent of instructor.

**FIRE 200 Special Topics .. . . . . (1-3 cr.)**

Specific subjects to be announced in the Schedule of Classes. Course may be repeated for credit as topics change.

**FIRE 202 Wildland Fire Control .. . . . . (1-3 cr.)**

Focuses on factors affecting wildland fire control and prevention, fire behavior, control techniques, command structure and other operations including Standards for Survival I-100, S-130 and S-190 Meets or exceeds NWCG Training Curriculum and NFPA 1051 standards. Restricted to: Community Colleges Only.

**FIRE 203 Fire and Emergency Services Administration (3 cr.)**

This course introduces the student to the organization and management of a fire and emergency services department and the relationship of government agencies to the fire services department and the relationship of government agencies to the fire service. Emphasis is placed on fire and emergency service, ethics, and leadership from the perspective of the company officer. Restricted to: Community colleges only.

**FIRE 210 Building Construction for Fire Protection .. . (3 cr.)**

This course provides the components of building construction related to firefighter and life safety. The elements of construction and design of structures are shown to be key factors when inspecting buildings, preplanning fire operations, and operating at emergencies. Restricted to: Community colleges only.

**FIRE 222 Aircraft Fire Control .. . . . . (3 cr.)**

Provides a broad understanding of airport operations required to effectively perform aircraft firefighting and other emergencies. Meets or exceeds NFPA 402, 403, 405 standards. Restricted to: Community Colleges only.

**FIRE 223 Fire Investigations I .. . . . . (3 cr.)**

This course is intended to provide the student with the fundamentals and technical knowledge needed for proper fire scene interpretation, including recognizing and conducting origin and cause, preservation of evidence and documentation, scene security, motives of the firesetter, and types of fire causes. Restricted to: Community colleges only.

**FIRE 224 Strategy and Tactics .. . . . . (3 cr.)**

This course provides the principles of fire ground control through utilization of personnel, equipment, and extinguishing agents. Restricted

to: Community colleges only.

**FIRE 225 Fire Protection Systems . . . . . (3 cr.)**

This course provides information relating to the features and design and operation of fire alarm systems, water-based fire suppression systems, special hazard fire suppression systems, water supply for fire protection and portable fire extinguishers. Restricted to: Community colleges only.

**FIRE 230 Fire Service Instructor. . . . . (3 cr.)**

Provides the instructor candidate with methods and techniques of instruction including oral communications, preparing lesson plans, writing performance objectives, use of audio and other training aids, and the selection, evaluation and preparation of performance tests. Meets and exceeds NFPA 1041 Level I standards. Restricted to: Community Colleges only.

**FREN – FRENCH**

**FREN 111. Elementary French I . . . . . (4 cr.)**

French language for beginners.

**FREN 112. Elementary French II. . . . . (4 cr.)**

French language for beginners. Prerequisite: C or better in FREN 111.

**FREN 211. Intermediate French I . . . . . (3 cr.)**

Speaking, reading, and writing. Prerequisite: C or better in FREN 112.

**FREN 212. Intermediate French II. . . . . (3 cr.)**

Speaking, reading, and writing. Prerequisite: C or better in FREN 211.

**GEOG - GEOGRAPHY**

**GEOG 111G. Geography of the Natural Envir. . . . . (4 cr.)**

Introduction to the physical processes that shape the human environment: climate and weather, vegetation dynamics and distribution, soil development and classification, and geomorphic processes and landform development.

**GEOG 112G. World Regional Geography. . . . . (3 cr.)**

Overview of the physical geography, natural resources, cultural landscapes, and current problems of the world's major regions. Students will also examine current events at a variety of geographic scales.

**GEOG 120G. Culture and Environment . . . . . (3 cr.)**

Study of human-environmental relationships: how the earth works and how cultures impact or conserve nature. Introduction to relationships between people and natural resources, ecosystems, global climate change, pollution, and conservation.

**GEOG 259. Introduction to Oceanography . . . . . (4 cr.)**

Introduces the origin and development of the ocean and marine ecological concepts. Examines physical processes such as waves, tides, and currents and their impact on shorelines, the ocean floor, and basins. Investigates physical processes as they relate to oceanographic concepts. Includes media via the Internet and laboratory examination of current oceanic data as an alternative to the actual oceanic experience. Students will gain a basic knowledge and appreciation of the ocean's impact on the world's ecology.

**GEOG 295. Introduction to Climate Science. . . . . (4 cr.)**

Examines fundamentals and related issues of Earth's climate system, climate variability, and climate change. Develops solid understandings of Earth's climate system framed in the dynamic, Earth system based approach to the science.

**GEOL - GEOLOGY**

**GEOL 111G. Survey of Geology . . . . . (4 cr.)**

Covers the fundamental principles of physical geology, including the origin of minerals and rocks, geologic time, rock deformation, and plate tectonics.

**GEOL 212G. The Dynamic Earth . . . . . (4 cr.)**

Introduction to earth systems. Geology and the solid earth, geologic time and earth history, water and the world oceans, atmosphere and weather, the solar system. Community Colleges only.

**GEOL 220. Special Topics . . . . . (1-3 cr.)**

Specific subjects to be announced in the Schedule of Classes. Community Colleges only. May be repeated for a maximum of 12 credits.

**GOVT - GOVERNMENT**

**GOVT 100G. American National Government. . . . . (3 cr.)**

U.S. constitutional system; legislative, executive and judicial processes; popular and group influence.

**GOVT 110G. Introduction to Political Science. . . . . (3 cr.)**

This class covers fundamental concepts such as justice, sovereignty and power; political theories and ideologies; and government systems that range from democratic to authoritarian.

**GOVT 150G. American Political Issues. . . . . (3 cr.)**

Major contemporary problems of American society and their political implications.

**GOVT 160G. International Political Issues. . . . . (3 cr.)**

Current developments and issues in world politics.

**GOVT 201. Special Topics . . . . . (3 cr.)**

Special topics to be announced in Schedule of Classes. Community Colleges only. May be repeated for a maximum of 12 credits.

**HIST - HISTORY**

**HIST 101G. Roots of Modern Europe . . . . . (3 cr.)**

Economic, social, political, and cultural development from earliest times to about 1700.

**HIST 102G. Modern Europe . . . . . (3 cr.)**

Economic, social, political, and cultural development from 1700 to the present.

**HIST 201G. Intro. to Early American History . . . . . (3 cr.)**

History of the United States to 1877, with varying emphasis on social, political, economic, diplomatic, and cultural development.

**HIST 202G. Intro. to Recent American History** . . . . . (3 cr.)  
History of the United States since 1877, with varying emphasis on social, political, economic, diplomatic, and cultural development.

**HIST 261. New Mexico History** . . . . . (3 cr.)  
Economic, political, and social development of New Mexico from exploration to modern times. Community Colleges only.

**HIST 269. Special Topics** . . . . . (1-3 cr.)  
Specific subjects to be announced in the Schedule of Classes. Community Colleges only. May be repeated for a max of 12 credits.

**HIT – HEALTH INFORMATION TECHNOLOGY**

**HIT 120. Health Info. Intro. to Pharmacology** . . . . . (3 cr.)  
Introduction to the principles of pharmacology, including drug terminology; drug origins, forms, and actions; routes of administration; as well as the use of generic name drugs, trade name drugs and categories of drugs to treat multiple and specific body systems.

**HIT 130. Health Info. Tech. Anatomy & Physiology** . . . . . (3 cr.)  
An introductory course in the basics of human structure and function. Body systems are examined as to how they relate to proper code selection and as part of the functioning of the body as a whole. Restricted to: HIT majors. Community Colleges only.

**HIT 140. Health Info. Intro. to Pathophysiology** . . . . . (3 cr.)  
Introduction to the nature of disease and its effect on body systems. Disease processes affecting the human body via an integrated approach to specific disease entities will be presented including a review of normal functions of the appropriate body systems. Diseases will be studied in relation to their etiology, pathology, physical signs and symptoms, diagnostic procedures, complications, treatment modalities and prognosis.

**HIT 150. Introduction to Medical Terminology** . . . . . (3 cr.)  
The study and understanding of medical terminology as it relates to diseases, their causes and effects, and the terminology used in various medical specialties. Emphasis will be placed on learning the basic elements of medical words, appropriate spelling and use of medical terms, and use of medical abbreviations. Restricted to: Community Colleges only.

**HIT 158. Advanced Medical Terminology** . . . . . (3 cr.)  
Builds upon the concepts covered in Introduction to Medical Terminology providing greater understanding of how to properly use and apply medical terminology used in various health fields. Emphasis will be on terminology used in medical records and procedures, medical billing and coding, and medical transcription. Terminology associated with the 11 body system's anatomy and physiology, pathology, diagnostic and therapeutic procedures, pharmacology, and abbreviations will also be introduced. Prerequisite(s): HIT 150. Restricted to: Community Colleges only.

**HIT 221. Internship I** . . . . . (1-3 cr.)  
Student is employed in an approved work site and is supervised and rated by the employer and instructor. Each requires a specified number of hours of on-the-job work experience. Restricted to HIT and BOT majors. Graded S/U.

**HIT 222. Internship II** . . . . . (1-3 cr.)  
Continuation of HIT 221. Restricted to HIT and BOT majors. Graded S/U.

**HIT 240. Health Information Quality Mgmt.** . . . . . (3 cr.)  
Introduction to basic concepts of quality improvement and performance improvement as they apply to health record systems and the health care industry. Quality assessment and improvement standards and requirements of licensing, accrediting fiscal and other regulatory agencies will be presented.

**HIT 248. Medical Coding I** . . . . . (3 cr.)  
Comprehensive overview of the fundamentals, coding conventions, and principles of selecting the most appropriate ICD-9-CM and future ICD-10-CM diagnostic and procedure codes. The most recent version of ICD-9-CM and an in depth study of the current Official Coding Guidelines for coding and reporting will be emphasized. Prerequisite(s): BOT 228. Restricted to: Community Colleges only.

**HIT 258. Medical Coding II** . . . . . (3 cr.)  
Continuation of Medical Coding I. Comprehensive overview of the coding and reporting guidelines, fundamentals, coding conventions, and principles of selecting the most appropriate CPT and HCPCS procedural codes for all medical specialties. The most recent version of CPT and a continued study of the ICD-9-CM coding conventions and principles will be emphasized. Designed as a medical coding capstone course. Prerequisite(s): HIT 248. Restricted to: Community Colleges only.

**HIT 268. Health Information Systems** . . . . . (3 cr.)  
Overview of health data management, work planning, and organization principles; an introduction to health care information systems; and review of the fundamentals of information systems for managerial, clinical support, and information systems.

**HNDS - HUMAN NUTRITION AND DIET**

**HNDS 251. Human Nutrition** . . . . . (3 cr.)  
Principles of normal nutrition. Relation of nutrition to health. Course contains greater amounts of chemistry and biology than HNDS 163. Open to nonmajors.

**HOST – HOSPITALITY AND TOURISM**

**HOST 204- Promotion of Hospitality Service** . . . . . (3 cr.)  
Organization of hotel marketing functions; developing a marketing plan to sell the varied services of the hotel/motel property. Restricted to: Community College campus only.

**HOST 205- Housekeeping Maint. & Security** . . . . . (3 cr.)  
Function of housekeeping departments, including personnel, sanitation, maintenance, and materials. A survey of security procedures to include guest protection and internal security of hotel/motel assets. Restricted to: Community College campus only.

**HOST 206- Travel and Tourism Operations** . . . . . (3 cr.)  
Transportation, wholesale and retail operations, attractions, the traveler, tourism development, and operational characteristics of tourism busi-

ness. Restricted to: Community College campus only.

**HOST 207. Customer Serv. for Hospitality Industry. . . . . (3 cr.)**

Concepts of service and the customer, integrating the need for service quality, and the continuing efforts to maximize returns for the operation. Classic service styles as well as more modern service techniques are covered. Students gain in-depth managerial knowledge, planning skills, and hands-on techniques for consistently delivering quality and service in a variety of operations. Community College campuses only.

**HOST 208. Hospitality Supervision . . . . . (3 cr.)**

Strategies for directing, leading, managing change and resolving conflict. Prepares students to meet expectations of management, guests, employees, and governmental agencies. Community College campuses only.

**HOST 209. Managerial Accounting for Hospitality . . . . . (3 cr.)**

Prepares students to make effective business decisions based on financial report information; forecasting, budgeting, cost analysis. Prerequisite(s): BOT 120 or ACCT 252. Community College campuses only.

**HOST 210. Catering and Banquet Operations. . . . . (3 cr.)**

Teaches the basics of catering and banquet operations, including computer coordination, planning, setup, service, and completion. Restricted to Community Colleges campuses only.

**HOST 214. Purchasing and Kitchen Management . . . . . (3 cr.)**

Technical purchasing concepts, product selection, and specifications. Safety and sanitation as they relate to food service establishments. Prepares student for work with HACCP programs. Restricted to Community Colleges campuses only.

**HOST 216. Event, Conference and Convention Ops. . . . . (3 cr.)**

The ability to successfully plan, organize, arrange, and execute special events is critical to the success of many hospitality organizations. This course gives the student a grounding in the skills necessary to achieve success in this area. A variety of events are discussed and the similarities and differences with conferences and conventions are explored. Students are taught to organize and plan events of varying type and durations. Sales, logistics and organizing skills are emphasized. Restricted to: Community College campuses only.

**HOST 219. Safety/Security/Sanitation in Hosp. Ops. . . . . (3 cr.)**

It is the responsibility of the manager to provide appropriate security, sanitation, and safety precautions in hospitality operations. Preparation for internal and external disasters is an important task for the Hospitality Manager. This course uses the National Restaurant Association ServSafe- training material. Restricted to: Community College campuses only.

**HOST 220. Experiential Travel. . . . . (3 cr.)**

Course provides an opportunity for students to plan, prepare for and experience travel to destinations they might not otherwise have visited. Students experience local culture and peoples. May be repeated up to 9 credits. Prerequisite(s): HOST 201 or consent of instructor. Restricted to Community Colleges campuses only.

**HOST 221. Internship I . . . . . (1-3 cr.)**

Student employed in approved work site; supervised and rated by employer and instructor. Each credit requires specified number of

hours of on-the-job work experience. Consent of instructor required. Graded: S/U. Restricted to: Community College campuses only. Restricted to HOST majors.

**HOST 222. Cooperative Experience II. . . . . (3 cr.)**

Continuation of HOST 221. Restricted to majors. Graded: S/U. Prerequisite(s): HOST 221. Restricted to: Community College campuses only. Restricted to HOST majors.

**HOST 223. Travel Agency Principles . . . . . (3 cr.)**

Travel agents are called upon to exhibit broad knowledge about many different tourism products. This course prepares students to undertake the challenging job of an agent in a travel agency. Restricted to: Dona Ana campus, Carlsbad campus.

**HOST 224. Travel Agency Booking & Operations. . . . . (3 cr.)**

Course trains students to use the common electronic booking software that is found in travel agencies. Familiarization with operational procedures of travel agencies. Prerequisite(s): HOST 223. Restricted to: Community College campuses only.

**HOST 230. Wedding Events Management. . . . . (3 cr.)**

This course will address various issues that could potentially arise in the preparation and management of a wedding or related event. All aspects of planning and attention to details that will ensure that students are prepared to provide services as a professional wedding planner. Restricted to: Community College campuses only.

**HVAC-HEATING, AIR CONDITIONING, REFRIGERATION**

**HVAC 101. Fundamentals of Refrigeration. . . . . (4 cr.)**

Refrigeration cycle and the various mechanical components. Use of special tools, equipment, and safety precautions.

**HVAC 102. Fundamentals of Electricity. . . . . (4 cr.)**

Introduction to electricity theory, OHM s Law, circuits, AC/DC, and practical applications.

**HVAC 103. Electrical and Mechanical Controls I . . . . . (4 cr.)**

Applications of basic electrical and mechanical controls. Reading and drawing diagrams of simple refrigerating equipment. Safe use of testing equipment. Prerequisites: HVAC 101 and HVAC 102, or consent of instructor.

**HVAC 104. Domestic Refrigeration. . . . . (4 cr.)**

Installation and maintenance of refrigeration systems. Prerequisites: HVAC 101, and HVAC 102, or consent of instructor.

**HVAC 205. Commercial Refrigeration Systems . . . . . (4 cr.)**

Service and maintenance of commercial refrigeration equipment to include evacuation and charging procedures, electrical diagrams, and compressors and accessories. Prerequisites: HVAC 103 or consent of instructor.

**HVAC 207. Residential Air Conditioning Systems . . . . . (4 cr.)**

Applications and types of equipment used in comfort cooling. Preventive maintenance, service, and repairs common to evaporative coolers and refrigerated air conditioning systems. Air properties and psychometrics. Prerequisite: HVAC 103 or consent of instructor.

**HVAC 209. Residential Heating Systems. . . . . (4 cr.)**

Gas and electric systems used in comfort heating. Maintenance procedures, safety, troubleshooting, and servicing malfunctions in equipment. Prerequisite: HVAC 103 or consent of instructor.

**HVAC 210. Commercial AC and Heating Systems. . . . . (4 cr.)**

Covers troubleshooting mechanical and electrical problems associated with HVAC equipment in commercial buildings. Includes gas, electric, and heat pump systems. Prerequisite: HVAC 103 or consent of instructor.

**HVAC 213. Practicum . . . . . (3 cr.)**

Working in the field with journeymen service technicians. Develop and apply job skills. Consent of instructor required. Prerequisite(s): Consent of instructor. Restricted to: Community colleges only.

**HVAC 220. Intro. to Sheet Metal Fabrication . . . . . (4 cr.)**

Introduction to sheet metal fabrication to include hands-on practical laboratory applications, cutting and forming procedures, identifying types and gauges. Design and layout techniques. Prerequisite: OETS 118 or equivalent math or consent of instructor.

**INMT – INDUSTRIAL MAINTENANCE**

**INMT 133. Process Technology and Systems . . . . . (4 cr.)**

Provides instruction in the use of common process equipment. Students will use appropriate terminology and identify process equipment components such as piping and tubing, valves, pumps, compressors, turbines, motors, engines, heat exchangers, heaters, furnaces, boilers, filters dryers and other miscellaneous vessels. Included are the basic functions, scientific principles and symbols. Students will identify components on typical Process Flow Diagrams and Process and Instrument Diagrams. Restricted to Carlsbad campus only.

**INMT 134. Maintenance Principles . . . . . (4 cr.)**

The course is an introduction to the maintenance of equipment utilizing mechanical, electrical and instrumentation concepts. Topics include: hand tools, bearing fundamentals, equipment lubrication, material handling, electrical safety, battery systems, diagrams, electrical production and distribution, transformers, breakers, switches, AC and DC motors, motor controllers and operations, and introduction to automation and instrumentation control. Restricted to Carlsbad campus only.

**INMT 165. Equipment Processes . . . . . (4 cr.)**

This course introduces power transmission equipment and machinery components, including belt/chain driven equipment, speed reducers, variable speed drives, couplings, clutches, and conveying equipment. Students will learn the operation, maintenance, and troubleshooting for these types of equipment. The course also includes Overhead Crane Certification and Safety. Restricted to Carlsbad campus only.

**INMT 205. Programmable Logic Controllers & Appls. . . (4 cr.)**

Students learn about programmable logic controllers; architecture; programming, interfacing, and applications. Hands-on experience on modern commercial PLC units is the main component. Prerequisite(s): Computer Literacy (CS 110). Restricted to Carlsbad campus only.

**INMT 223. Electrical Repairs. . . . . (4 cr.)**

This course outlines for students the types of problems that occur in electrical machinery and systems. The course covers trouble-shooting and diagnosis, preventative maintenance, and how to make necessary

repairs. Restricted to Carlsbad campus only.

**INMT 235. Mechanical Drives I . . . . . (4 cr.)**

This course teaches the fundamentals of mechanical transmission systems used in industrial, agricultural, and mobile applications. Students will learn industrial relevant skills including how to: operate, install and analyze performance, and design basic transmission systems using chains, feed-belts, spur gears, bearings, and couplings. Vibration analysis will be used to determine when to perform maintenance of power transmission components. The course also covers power transmission safety, and introduction to belt and chain drives (applications, installations, and tensioning), and introduction to gear drives, coupling, and bearing, basic troubleshooting, blueprint and print reading, learning the basics of electrical drives and PDM and PM. Restricted to Carlsbad campus only.

**INMT 236. Lubrication Process . . . . . (3 cr.)**

This course teaches the technical skills needed to operate, install, tune, maintain and troubleshoot automatic lubrication systems. Lubrication concepts, setup and tuning, pneumatic pumps, series-progressive valve systems and microprocessor based lubrication controllers will be covered. The course covers the principles of and importance of lubrication, oils and grease types and applications, lube management (storage, handling, and purity), and PDM and PM. Restricted to Carlsbad campus only.

**INMT 237. Hydraulics I . . . . . (2 cr.)**

This course teaches fundamentals of hydraulic systems used in industry mobile application. Students learn the basic theory of application of hydraulic and electricity as it applies to hydraulics. Covered in the course are basic systems, principles of flow, pressure, viscosity, filtration, and colling. Also covered are basic components such as motor, pumps, cylinders, piping and control and relief valves. Troubleshooting strategies are discussed, along with blueprint and print reading, and PDM and PM. Industry, relevant skills including how to operate, install, analyze performance, and design basic hydraulic systems, reviewing intermediate hydraulic components and system applications. Restricted to Carlsbad campus only.

**INMT 261. Pump Operations I . . . . . (4 cr.)**

This course teaches how to select, operate, install, maintain and repair the many types of pumps used by industry. Students learn the theory and practical application of all types of processed pumps and pipe systems. It covers types, components, and systems operation. It also covers troubleshooting for flow loss and cavitation. Students learn how to select, operate, install, maintain and repair the many types of pumps used by industry. Other topics covered include: Net Positive Suction Head, pump flow/head measurement, pressure head conversion, pressure flow characteristics, cavitation, series/parallel pump operation, mechanical seal/stuffing box maintenance, multi stage operation and construction, positive displacement pumps, turbine, diaphragm, peristaltic, piston, gear, and magnetic pump systems. Restricted to Carlsbad campus only.

**INMT 262. Piping Systems. . . . . (2 cr.)**

This course teaches students how to install, maintain and troubleshoot fluid systems such as how to select, size, identify, and install a variety of types of piping, fittings, and valves. Measurement techniques from basic to precision measurement, gauging, including the fundamentals of demensioning and tolerancing will taught. Restricted to Carlsbad campus only.

ods. Prerequisites: MATH 192G, C E 233. Corequisite: MATH 291G.

**INMT 263. Mechanical Drives II. . . . . (4 cr.)**

This course teaches the bearings and gears used in heavy duty mechanical transmission systems. This course will emphasize linear access drives, clutches, and brakes. In addition, this course teaches how to set up, operate and apply laser shaft alignment to a variety of industrial applications. This course is a study of the basic concepts and procedures for the maintenance and operations of pumps, turbines, seals, bearings, and compressors. The course will provide the student with the knowledge and skills necessary to perform proper maintenance, repair, replacement and selection of pumps, turbines, seals, bearings and compressors. Also covered are advanced gearbox, coupling and bearings, precision alignment (shaft, flange, and sheave), as well as basic vibration analysis and thermography as troubleshooting and RCA aids. Restricted to Carlsbad campus only.

**INMT 264. Rigging. . . . . (2 cr.)**

This course teaches how to safely move loads of different shapes and sizes using a variety of different methods. Students will lift loads and demonstrate how to move it. Students will use hoists, slings, ropes and fittings to learn how to safely lift a wide variety of loads. Included are weight estimation, lifting rules, load ratings (sling, wire, ropes and hoists). Restricted to Carlsbad campus only.

**INMT 265. Hydraulics II. . . . . (2 cr.)**

This course teaches advanced hydraulics systems. The student will learn operation of advanced hydraulic systems applications, equipment installation, performance analysis of motors and pumps, accumulators, control, relief and check valve, equipment maintenance, and system design. The course covers accumulators, sequence valves, pilot circuits and unloader valves. Students learn more troubleshooting, hydraulic drives and other applications. Restricted to Carlsbad campus only.

**INMT 267. Pump Operations II . . . . . (2 cr.)**

This course teaches the student the disassembly, inspection and reassembly of centrifugal and positive displacement pumps. This course allows the student to identify and replace worn or broken components of pumps, and learn predictive and preventive maintenance principles. Lockout of the pump will be performed in addition to measurements and alignment. Restricted to Carlsbad campus only.

**JOUR – JOURNALISM**

**JOUR 105G. Media and Society. . . . . (3 cr.)**

Functions and organization of the mass media system in the United States; power of the mass media to affect knowledge, opinions, and social values; and the impact of new technologies.

**LING - LINGUISTICS**

**LING 200G. Introduction to Language . . . . . (3 cr.)**

Traditional fields of language study (sound, grammar, meaning) and newer ones (language as social behavior, language and cognition, language variation, animal communication).

**M E – MECHANICAL ENGINEERING**

**M E 234. Mechanics-Dynamics. . . . . (3 cr.)**

Kinematics and dynamic behavior of solid bodies utilizing vector meth-

**MAT - AUTOMATION & MANUFACTURING**

**MAT 102. Print Reading for Industry. . . . . (3 cr.)**

Reading, interpretation, and revisions of industrial technical drawings common to manufacturing, Aerospace, machine parts, electrical, hydraulic, and Pneumatic drawings. Interpretation of engineering drawings and related shop calculations. Introduction Crosslisted with: AERT 113. Restricted to: Community Colleges only.

**MAT 105. Introduction to Manufacturing . . . . . (3 cr.)**

Introduction to manufacturing evolution from basic assembly process to modern automated processes. Covers history, employability, soft skills, quality measurements, teamwork concept, production requirements, and considerations in plan layout and design. Minimum math proficiency of CCDM 114 required or math placement into MATH 120 or higher. Restricted to: Community Colleges only. Crosslisted with: AERT 112

**MAT 106. Applied Manufacturing Practices . . . . . (3 cr.)**

Course will illustrate how various products are manufactured along with associated process. Mechanical behavior such as bending, cold worked, strained, work hardened, and heat transfer will be emphasized as well. In lab, students will learn how to make selected products starting from prints to complete projects including quality control. Crosslisted with: AERT114. Restricted to: Community Colleges only.

**MAT 108. Metrology, Safety/Qual. Ctrl. Manufact . . . . . (3 cr.)**

Use of measuring tools in manufacturing process and quality control. These tools include: vernier and digital micrometers, calipers, height gauges, hole gauges, pin gauges, electrical pressure/flow, temperature measuring, stress/strain measurements, and non-destructive testing (eddy currents, magnetic particle, ultrasonic, bubble emission, x-ray, Gamma ray, radiography, visual inspection, ring test, taping & Zygo). Instruction to use of coordinate machine while covering the safety issues that pertains to these types of tools and equipment. Restricted to: Community Colleges only.

**MAT 110. Machine Operation and Safety. . . . . (3 cr.)**

Introduction to the operation and safety aspects of various types of machinery and equipment, including both mechanical and electrical machines, Rigid Tubing, and Flexible Lines. Maintenance and safety operation of industrial equipment will also be covered. Restricted to: Community Colleges only. Crosslisted with: AERT 115

**MAT 130. Applied Industrial Electricity I . . . . . (4 cr.)**

Electrical safety, AC and DC circuits, use and care of common measuring instrumentation, schematic and wiring diagrams, electromagnetism, National Electric Code branch circuits. Prerequisite(s): MATH 120 or ELT 120 or OETS 118. Restricted to: Community Colleges only.

**MAT 135. Applied Industrial Electricity II . . . . . (4 cr.)**

Relationship between motor power, speed, and torque, basic application of relay circuits, motor control circuits, inductance and capacitance factors, transformers, solid state devices circuits and applications. Prerequisite(s): MAT 130. Community Colleges only.

**MAT 145. Electromechanical Systems for Non-Majors .. (4 cr.)**

Electromechanical system interfacing. Principles and applications

of preventive and corrective maintenance procedures on automated industrial production machines using system technical and maintenance manuals to develop troubleshooting procedures using systems block and schematic diagrams. Prerequisite: consent of instructor.

**MAT 234. Industrial Electricity Maintenance ... (3 cr.)**

Introduction into electrical systems, theory and uses for the different types of motors used in the industry and related industrial safety practices. DC, AC stepper and servo motors, motor speed and torque, motor performance, and efficiency, motor control fundamentals using variable frequency drives, vector controls, servo and stepper drives. Restricted to: Community Colleges only.

**MAT 265. Special Topics ... (1-6 cr.)**

Course subtitled in the Schedule of Classes. Prerequisite: consent of instructor. May be repeated for a maximum of 12 credits.

**MATH - Mathematics**

The basic skills requirement in mathematics may be met by earning a grade of C or higher in both MATH 111 and MATH 112, or in any lower division mathematics course numbered 120 or above. For other options, see "Basic Academic Skills" in the "General Information" section of this Catalog.

A student may not receive credit for a lower division mathematics course if it serves as a prerequisite to a lower-division math course that the student had previously passed with a grade of C or better.

NOTE: Students without an adequate placement score to enroll in MATH 111, MATH 120 or MATH 210G can gain admission to the course by earning a grade of C or better in CCDM 114N at an NMSU branch campus. Students wishing to enroll in MATH 121G, 142G, 180, 191, 230, 235, 279, 280 or STAT 251G must satisfy one of the following: have passed the stated prerequisite course with a C or better, or have earned an adequate score on the Mathematics Placement Examination, the results of which will be made available to the student's adviser. A student who has not satisfied one of these requirements before registering may enroll temporarily in UNIV000, then drop/add to an appropriate course at the beginning of the semester after taking the MPE and being advised.

**MATH 111. Fund. Of Elementary Mathematics I.. ... (3 cr.)**

Numbers and the four operations of arithmetic. Understanding and comparing multiple representations of numbers and operations, in particular how these representations build from whole numbers to integers to fractions and decimals. Applying properties of numbers and operations in contextual situations, including measurement, and making reasonable estimates. Reasoning, communicating, and problem solving with numbers and operations. Applications to ratio, and connections with algebra. Taught primarily through student activities and investigations. Prerequisite(s): ENGL 111G and grade of C or better in MATH 120.

**MATH 112G. Fund. Of Elementary Math II. ... (3 cr.)**

Geometry and measurement. Multiple approaches to solving problems and understanding concepts in geometry. Analyzing and constructing two- and three-dimensional shapes. Measurable attributes, including angle, length, area, and volume. Understanding and applying units and unit conversions. Transformations, congruence, and symmetry. Scale

factor and similarity. Coordinate geometry and connections with algebra. Reasoning and communicating about geometric concepts. Taught primarily through student activities and investigations. Prerequisite(s): C or better in MATH 111.

**MATH 120. Intermediate Algebra ... (3 cr.)**

Linear and algebraic functions as they arise in real world problems. Exponential and logarithmic functions. Equations and inequalities and their solutions considered symbolically, graphically and numerically. Prerequisite: adequate score on the Mathematics Placement Examination (see note above.)

**MATH 121G. College Algebra ... (3 cr.)**

Fundamental concepts of functions, including algebraic and graphical properties. Fitting functions to data. Finding zeroes and extreme values. Solving systems of equations. Prerequisites: Adequate math placement score or C or better in MATH 120.

**MATH 142G. Calculus for the Biol. & Mgmt. Sci. ... (3 cr.)**

Review of functions. Derivatives, exponential and logarithmic functions, antiderivatives and indefinite integrals, basic ordinary differential equations and growth models, with an emphasis on applications. Includes a significant writing component. Prerequisite(s): C or better in MATH 121G.

**MATH 175. Trigonometry ... (3 cr.)**

Trigonometric functions, graphs, identities, inverse functions, polar coordinates and applications. Complex numbers, curve fitting, roots of polynomials, exponential and logarithmic functions, conics, systems of equations and matrices. May not be taken for credit by students having credit for MATH 136. Prerequisite: C or better in MATH 121G. Restricted to Community Colleges only.

**MATH 190G. Trigonometry and Precalculus ... (4 cr.)**

Elementary functions used in the sciences with emphasis on trigonometric functions and their inverses. Polar coordinates. Complex numbers and Euler's formula. Analytic geometry and vectors. Prerequisite: adequate score on Mathematics placement exam or a C or better in MATH 121G (see note at beginning of this section).

**MATH 191G. Calculus and Analytic Geometry I. ... (4 cr.)**

Limits and continuity, theory and computation of derivatives, applications of derivatives, extreme values, critical points, derivative tests, L'Hopital's Rule. Prerequisite(s): C or better in MATH 190G.

**MATH 192G. Calculus and Analytic Geometry II. ... (4 cr.)**

Riemann sums, the definite integral, antiderivatives, fundamental theorems, techniques of integration, applications of integrals, improper integrals, Taylor polynomials, sequences and series, power series and Taylor series. Prerequisite(s): C or better in MATH 191G.

**MATH 210G. Mathematics Appreciation. ... (3 cr.)**

Mathematics and its role in the development and maintenance of civilization. Prerequisites: High school algebra, and an adequate score on the Mathematics Placement Examination.

**MATH 215. Fundamentals of Elem. Mathematics III. ... (3 cr.)**

Probability, statistics, ratios, and proportional relationships. Experimental and theoretical probability. Collecting, analyzing, and displaying data, including measurement data. Multiple approaches to solving problems involving proportional relationships, with connections to number and

operation, geometry and measurement, and algebra. Understanding data in professional contexts of teaching. Taught primarily through student activities and investigations. Prerequisite(s): C or better in MATH 112.

**MATH 230. Matrices and Linear Programming.. . . . . (3 cr.)**

Linear algebra, linear programming and network models, with applications to the behavioral sciences. Prerequisite: C or better in MATH 121G.

**MATH 280. Introduction to Linear Algebra . . . . . (3 cr.)**

Systems of equations, matrices, vector spaces and linear transformations. Applications to computer science. Prerequisite(s)/ Corequisite(s): Grade of C or better in MATH 192G. Prerequisite(s): Grade of C or better in MATH 190.

**MATH 291G. Calculus and Analytic Geometry III . . . . . (3 cr.)**

Vector algebra, directional derivatives, approximation, max-min problems, multiple integrals, applications, cylindrical and spherical coordinates, change of variables. Prerequisite: grade of C or better in MATH 192G.

**MGT - MANAGEMENT**

**MGT 201. Introduction to Management . . . . . (3 cr.)**

Covers the functioning and administration of different types of complex organizations. Concepts and theories of management and organizational behavior.

**MKTG - MARKETING**

**MKTG 203. Introduction to Marketing . . . . . (3 cr.)**

Covers processes, functions and principles in the current marketing system. Includes role of marketing in the economy, types of markets, product development, distribution channels, pricing and promotion strategies, market research and management of the processes. Community Colleges only.

**MUS - MUSIC**

**MUS 101G. An Introduction to Music . . . . . (3 cr.)**

An introduction to music for the non-music major to encourage the enjoyment of listening to and understanding the world's great music from the past to the present.

**MUS 161. Concert Choir. . . . . (1 cr.)**

Campus choir composed of both music and non-music majors. Emphasis on vocal techniques, sight-singing, and basics of choral musicianship. May be taken for unlimited credit.

**MUS 201G. Hist. of Jazz in Pop. Mus.: Blend/Cultures (3 cr.)**

Jazz in popular music as it relates to music history and the development of world cultures.

**MUS 260. Special Topics I . . . . . (1-3 cr.)**

Emphasis on special areas of music; designed for highly motivated students. May be taken for unlimited credit.

**NA - NURSING ASSISTANT**

**NA 101. Nursing Assistant Theory and Lab . . . . . (6 cr.)**

Nurse aide skills with emphasis on a bio-psychosocial-cultural approach to client care. Practice of these skills is provided in the laboratory as well as at a clinical site. Successful completion of the course prepares and qualifies the student to take the Prometric certification examination. Prerequisite(s): (Reading Compass score of 81 or greater or CCDD 110N with C or better) and (English Compass score of 76 or greater or CCDE 110N with C or better) and (Math Compass score of 50 or greater or CCDD 103N with C or better). Restricted to: Community Colleges only.

**NA 109. Phlebotomist Basic. . . . . (4 cr.)**

Basic theory and skills of phlebotomy following OSHA and Center for Disease Control guidelines. Prepares students for employment as a phlebotomist in licensed settings. Requires a C or better to pass.

**NURS - NURSING**

The following courses are open to nursing students only

**NURS 120. Introduction to Pharmacology . . . . . (3 cr.)**

General principles of pharmacology including methods of administration, effect on the body, interactions with other drugs, and classification of drugs. Focus on the health care provider's role in safe pharmacologic intervention. Restricted to Allied Health majors. Restricted to: Community Colleges only.

**NURS 140. Pathophysiology for Allied Health Prof... . . . . (3 cr.)**

Introduction to the nature of disease and its effect on body systems. Deals with the disease processes affecting the human body via an integrated approach to specific disease entities. Includes a review of normal functions of the appropriate body systems. Diseases are studied in relationship to their etiology, pathology, physical signs and symptoms, diagnostic procedures, complication, treatment modalities, and prognosis. Prerequisite: a grade of C or better in OEHO 140. Restricted to Allied Health and Health Information Technology majors. Restricted to: Community Colleges only.

**NURS 146. Common Health Deviations... . . . . (6 cr.)**

Common health deviations and the manner by which they alter various body functions are explored. The role of the licensed practical nurse in assisting clients with common health deviations is presented. Ethical and legal implications and the role of the practical nurse are also considered. The licensed practical nursing student will utilize the application of knowledge to a client care situation both in the sub-acute care and acute care settings. The nursing process is presented as a guide for coordinating client care with in a chosen nursing system, each phase of the nursing process is utilized as a method of coordinating client care. Grade of C or better required. Prerequisite(s): NURS153, NURS 156, NURS 154, NURS 157, and NURS 210 or consent of program director. Restricted to: Carlsbad campus only.

**NURS 150. Medical Terminology. . . . . (3 cr.)**

Understanding of the basic elements of medical words. Use of medical abbreviations. Same as OEHO 120 and BOT 150.

**NURS 153. Medication and Dosage Calculation. . . . . (1 cr.)**

Techniques of dosage calculation for medication and fluid administration. RR applicable. Prerequisite(s): Meet NMSU basic skills require-



ment in mathematics or consent of program director. Corequisite(s): NURS156 and NURS154.

**NURS 154. Physical Assessment . . . . . (2 cr.)**

Beginning techniques of physical assessment by systems will be presented by using the nursing process as a guide for identifying self-care requisites throughout the life span. Grade of C or better required. Prerequisite(s): BIOL 154 or BIOL 225 or consent of program director. Corequisite(s): NURS 153 & NURS 156. Community Colleges only.

**NURS 155. Special Topics. . . . . (1-4 cr.)**

Specific subjects to be announced in the Schedule of Classes.

**NURS 156. Basic Nursing Theory and Practice . . . . . (6 cr.)**

Introduction to the nursing profession and the beginning skills of nursing practice as it relates to normalcy. Embracing the theory of Dorothea Orem, the nursing process is presented as a means of guiding the student in promoting self-care. Ethical and legal aspects of nursing practice are also included. Basic clinical nursing skills will be presented and practiced in the nursing lab. The student will perform these skills with clients in an actual health care setting. Prerequisite(s): Consent of Program Director. Corequisite(s): NURS 153 and NURS 154. Restricted to: Carlsbad campus only.

**NURS 157. Maternal/Child Health Deviations . . . . . (8 cr.)**

The concepts and principles of nursing care of the family from conception to adolescence. Utilizing the nursing process, the student focuses on the supportive-educative nursing system to assist members of the family in meeting self-care requisites. Theoretical instruction applied to client care situation. Students assist clients in meeting universal and developmental self-care requisites. Experiences may occur in any of the regional health care facilities. Grade of C or better required. Prerequisite(s): NURS 156, NURS 153, and NURS 154 or consent of program director. Corequisite(s): NURS 210. Restricted to: Carlsbad campus only.

**NURS 210. Pharmacological Reqs. of Childbearing Family (1 cr.)**

Basic concepts of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, and their relationship to nursing care will be discussed focusing on medications commonly utilized with the childbearing family. Medication classes to be discussed include labor and delivery, analgesic, vitamins, respiratory, gynecological, endocrine, and anti-microbial/anti-infective drugs. Grade of C or better required. Prerequisite(s): BIOL 225 and BIOL 226 or consent of instructor and NURS 153, NURS 154 and NURS 156. Corequisite(s): NURS 157. Restricted to: Carlsbad campus only.

**NURS 211. Pharmacological Reqs. Simple Health Devia. (1 cr.)**

Basic concepts of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, and their relationship to nursing care are addressed focusing on medications related to the psychiatric, gastrointestinal, musculoskeletal, gynecological, hematological, and anti-neoplastic client. Grade of C or better required. Prerequisite(s): BIOL 225 and BIOL 226 or consent of instructor and NURS 153, NURS 154, NURS 156, NURS 157 and NURS 210. Corequisite(s): NURS 246 and NURS 258. Restricted to: Carlsbad campus only.

**NURS 212. Pharmacological Reqs. Complex Health Devia. (1 cr.)**

Basic concepts of pharmacology including pharmacokinetics, pharmacodynamics, and pharmacotherapeutics, and their relationship to nursing care is examined focusing on medications related to complex

health deviations. Drug classes to be discussed include cardiovascular, renal, endocrine, and neurological. Grade of C or better required. Prerequisite(s): BIOL 225 and BIOL 226 or consent of instructor, and NURS 153, NURS 154, NURS 156, NURS 157, NURS 246, NURS 258, NURS 210 and NURS 211. Corequisite(s): NURS 256 and NURS 260. Restricted to: Carlsbad campus only.

**NURS 246. Health Deviations I. . . . . (7 cr.)**

Introduction to medical/surgical clients whose self-care needs are routine and predictable. Focus is on simple health deviations, including concepts relative to health promotion and maintenance. Pharmacological therapies are included. Focus on the care of individuals with simple health deviations. Nursing process utilized to assist patients with meeting self-care needs. Student expected to apply all nursing systems while providing care for a group of two or three clients. Grade of C or better required. Prerequisite(s): NURS 153, NURS 156, NURS 154, NURS 157 and NURS 210 or consent of program director. Corequisite(s): NURS 211 and NURS 258. Restricted to: Carlsbad campus only.

**NURS 256. Health Deviations II. . . . . (8 cr.)**

Concepts and principles applied to clients with complex health deviations. Focus will be on acutely ill clients that require the nurse to function in all three nursing systems. Building upon knowledge gained in NURS 246, the student focuses on individuals with complex health deviations. The nursing process continues to serve as a guide in assisting clients to meet self-care needs. The student assists the health care team in all aspects of client care. Preceptorship experience in which the student makes application of all knowledge gained throughout the nursing program. Student experiences the role of the staff nurse under the guidance and direction of their preceptor and nursing instructor. Grade of C or better required. Prerequisite(s): NURS 153, 154, 156, 157, 210, 211, 246, and 258 or consent of program director. Corequisite(s): NURS 260 and NURS 212. Restricted to: Carlsbad campus only.

**NURS 258. Psychosocial Requisites: A Deficit Approach (3 cr.)**

Nursing theory and practice as it relates to the care of the client experiencing psychosocial health deviations. The role of the nurse is discussed along with the ethical and legal aspects of caring for the client with psychosocial disorders. Building upon the communication skills of listening and responding, the student develops the therapeutic skills of interpersonal relationships. All nursing systems will be utilized as the student makes application to the care of clients experiencing psychosocial deviations. Grade of C or better required. Prerequisite(s): NURS 153, 154, 156, 157, 210, 246, and 258 or consent of program director. Corequisite(s): NURS 211 and NURS 246. Restricted to: Carlsbad campus only.

**NURS 260. Mgmt. of Patients with Health Deviations .. (2 cr.)**

A capstone experience to the nursing program in which principles in management and delegation to less prepared personnel is explored. Includes the development of delegation skills while directing client activities in a work setting, and the development of the beginnings of nursing leadership roles. During this experience, the student makes application of all knowledge gained throughout the nursing curriculum. A review of leadership roles, legal issues and scope of practice with preparation for the NCLEX is included. Grade 'C' or better required. Lab fee included to cover cost of NCLEX review. Prerequisite(s): NURS 153, 154, 156, 157, 210, 211, 246, and 258 or consent of program director. Corequisite(s): NURS 212 and NURS 256. Restricted to: Carlsbad campus only.

**NURS 290. Pathophysiology I . . . . . (1-3 cr.)**

An introduction to pathophysiologic concepts using a body systems approach. Prerequisite: BIOL 226 or BIOL 254. Restricted to: Community Colleges only.

**NURS 291. Pathophysiology II . . . . . (1-3 cr.)**

A continuation of materials presented in NURS 290, Pathophysiology I, covering the remaining body systems. Prerequisite(s): BIOL 226 or 254 and NURS 290 or consent of program director. Restricted to: Community Colleges only.

**OECS - COMPUTER TECHNOLOGY**

**Occupational Education Courses**

Students enrolling in any of the OE prefix courses are advised that these courses are not intended to replace or substitute for any approved courses which are part of baccalaureate degree programs at New Mexico State University, without approval of the appropriate dean, and that any request for substitution may be denied. Requests for substitution must be considered on an individual basis by the dean of the college if a student elects to pursue a bachelor's degree.

**OECS 105. Introduction to Information Technology . . . (3 cr.)**

Introduction and application of basic information technology skills using personal computers including operating systems, common office application software, and the impact of technology on the economy and society. Restricted to: Community Colleges only.

**OECS 110. Introduction to Power Point . . . . . (1 cr.)**

An introduction to Power Point software to develop business presentations. Includes concepts of basic presentation methods and graphic design principles. Students will create and deliver presentations using text, charts, digitized images, and sound. Prerequisites: BCIS 110, C S 110, or OECS 105.

**OECS 125. Operating Systems . . . . . (1-3 cr.)**

Installation, configuration and optimization of current operating systems. Restricted to: Community Colleges only.

**OECS 128. Operating Systems Linux/Unix . . . . . (3 cr.)**

Installation, configuration, and use of Linux/Unix operating system software and utilities including hardware management, file management, use of command line, and scripting. Community Colleges only.

**OECS 140. Intro. to Game Production Industry . . . . . (3 cr.)**

Students explore the business behind game production, understanding how game companies are organized and funded, positions within the game industry, and what skills game producers need. Prerequisites: Either BCIS 110, C S 110, or OECS 105.

**OECS 141. Intro. to Interactive Game Programming . . . (3 cr.)**

This introductory programming class reviews the basics of programming, including the object-oriented approach. Students will de-construct existing games, develop their own code, and gain an appreciation for coding strategies. May be repeated for a maximum of 6 credits. Restricted to: Community Colleges Only. Prerequisites: C S 110, BCIS 110, or OECS 105.

**OECS 150. Intro. to Programming Using Visual Basic .. (4 cr.)**

Introduction to algorithmic problem-solving concepts, structured pro-

gramming design-oriented application programming interface development. Solutions to problems are implemented using the Visual Basic programming language in the Windows environment, with connection to Access databases as applicable. Prerequisite(s): CS 110, OECS 220, and MATH 120. Restricted to: Community Colleges only.

**OECS 155. Spec. Topics – Intro. Computer Tech. . . . (5 to 4 cr.)**

Topics to be announced in the Schedule of Classes. May be repeated up to 8 credits.

**OECS 185. PC Maintenance and Selection I. . . . . (1-3 cr.)**

Selecting, installing, configuring, troubleshooting, and maintaining microcomputers and peripheral devices. Prerequisites: BCIS 110, C S 110 or OECS 105.

**OECS 192. C++ Programming I . . . . . (3 cr.)**

Development of skills in programming using the C++ programming language. Restricted to: Community Colleges only.

**OECS 193. C++ Programming II. . . . . (3 cr.)**

Continuation of OECS 192. Prerequisite: OECS 192.

**OECS 195. Java Programming I. . . . . (1-3 cr.)**

Developing of skills in programming using the Java programming language. Restricted to: Community Colleges only.

**OECS 196. Java Programming II. . . . . (1-3 cr.)**

Continuation of OECS 195. Prerequisite: OECS 195. May be repeated for a maximum of 9 credits.

**OECS 200. Accounting on Microcomputers . . . . . (3 cr.)**

Fundamental accounting principles using popular microcomputer software to include G/L, A/R, A/P, purchase order, billing, inventory, and forecasting modules. Prerequisite: ACCT 252 or BOT 121.

**OECS 207. Windows . . . . . (5-3 cr.)**

Installation, configuration, and maintenance of Windows. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes. May be repeated up to 6 credits. Prerequisite(s): OECS 105 or BCS 110G or CS 110G or consent of instructor. Restricted to: Community Colleges only.

**OECS 208. Internet Applications . . . . . (1-3 cr.)**

Survey of the Internet to include e-mail, file transfer, current search techniques, the World Wide Web and basic Web page development. Prerequisite: C S 110G, BCIS 110 or OECS 105. May be repeated for a maximum of 6 credits.

**OECS 209. Computer Graphic Arts. . . . . (1-3 cr.)**

Basic graphics composition using computer programs to include editing and manipulating graphic images, clip-art, and printing of pictures. Prerequisite: OECS 105, C S 110, or OECS 101. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes.

**OECS 211. Word Processing Applications . . . . . (1-3 cr.)**

Basic word processing to include composing, editing, formatting, and printing of documents. Prerequisites: C S 110, BCIS 110 or OECS 105. May be repeated under different subtitles listed in the Schedule of Classes for a maximum of 6 credits.

**OECS 214. Creating a Web Page .. (1 cr.)**

Introduction to creating Web pages for business and personal use. Prerequisites: C S 110, BCIS 110 or OECS 105. Graded S/U.

**OECS 215. Spreadsheet Applications . . . . . (1-3 cr.)**

Use of spreadsheets to include graphics and business applications. Prerequisites: C S 110, BCIS 110 or OECS 105. May be repeated for a maximum of 6 credits.

**OECS 216. Programming for the Web . . . . . (3 cr.)**

Designing web-based applications using appropriate programming language(s) such as, but not limited to HTML, PHP, MySQL, SQL, Java, Perl, C or C++. May be repeated up to 6 credits. Prerequisite(s): One semester of any programming course. Restricted to: Community Colleges only.

**OECS 218. Web Page Programming Support. . . . . (3 cr.)**

Languages that support Web page development including HTML, Active X and Java Script. Implementation of forms and style sheets in Web pages also presented. Prerequisites: C S 110, BCIS 110 or OECS 105.

**OECS 220. Database Application and Design . . . . . (1-3 cr.)**

Creating, sorting, and searching of single and multifile databases to include report generation and programming database commands. May be repeated for a maximum of 6 credits under different subtitles listed in the Schedule of Classes. Prerequisite(s): C S 110 OR BCIS 110 OR E T 120 OR E T 122 OR OECS 105. Restricted to: Community Colleges only.

**OECS 221. Internship I.. . . . . (1-3 cr.)**

Student employed at approved work site; supervised and rated by employer and instructor. Each credit requires specified number of hours of on-the-job work experience. Prerequisite: consent of instructor. Restricted to OECS majors. Graded S/U.

**OECS 227. Computer Applications for Technicians... (3 cr.)**

Computer applications for service technicians in various disciplines. Hardware and software applications explored. Includes operating systems, high level programming, and networking hardware and software.

**OECS 230. Data Communications and Networks I ... (1-3 cr.)**

Definition of data communication; survey of hardware applications and teleprocessor software; examination and design of networks. Prerequisite: OECS 185. May be repeated for a maximum of 6 credits.

**OECS 231. Data Communications and Networks II ... (1-3 cr.)**

Installation and application of popular microcomputer network software. Prerequisite: OECS 230. May be repeated for a maximum of 6 credits.

**OECS 232. Implementing and Supporting Networks I .. (3 cr.)**

Knowledge and skills relating to post-installation and day-to-day administration tasks in a single-domain or multiple-domain network. Prerequisite: OECS 230 or OECS 261.

**OECS 233. Implementing and Supporting Networks II (1-3 cr.)**

Implementation, administration, and troubleshooting networks in an enterprise computing environment to include multiple servers, domain and sophisticated server applications. Prerequisite: OECS 232.

**OECS 235. Structured Query Language (SQL) ... (1-3 cr.)**

Installation, configuration, administration, and troubleshooting of SQL client/server database management system. Prerequisite: OECS 185, OECS 207, OECS 230 or OECS 261.

**OECS 236. Network Management .. (1-3 cr.)**

Administration and troubleshooting Systems Management Server (SMS). Prerequisite: OECS 234. May be repeated for a maximum of 6 credits.

**OECS 245. Game Programming I .. (3 cr.)**

Development of programming skills for games and animation using current programming languages and tools. May be repeated for a maximum of 6 credits. Prerequisite: consent of instructor.

**OECS 246. Game Programming II.. (3 cr.)**

Continuation of OECS 245. May be repeated for a maximum of 6 credits. Prerequisite: OECS 245.

**OECS 250. Systems Analysis and Design I. . . . . (3 cr.)**

Analysis and design of business data processing and information systems. Study of the System Life Cycle. Prerequisite(s): OECS 220. Restricted to: Community Colleges only.

**OECS 255. Special Topics. . . . . (1-4 cr.)**

Topics to be announced in the Schedule of Classes.

**OECS 260. Hypertext Markup Language (HTML) ... (1-3 cr.)**

Coverage of HTML as used for web-page development for Internet and Intranet. Text manipulation, graphics, hypertext links, lists, and tables. Prerequisite: C S 110, BCIS 110 or OECS 105. May be repeated for a maximum or 3 credits.

**OECS 261. Introduction to Networks. . . . . (4 cr.)**

Introduction to networking principles including the practical and conceptual skills for understanding basic networking, planning and designing networks, implementing IP addressing schemes, examining the OSI and TCP/IP layers, and performing basic configurations for routers and switches. Aligns to the first course of the Cisco Networking Academy CCNA curriculum. Prerequisite(s): C S 110G, BCIS 110 or OECS 105. Restricted to: Community Colleges only.

**OECS 262. Essentials of Routing and Switching . . . . . (4 cr.)**

Examination of the architecture, components, and operations of routers and switches in a small network. Student will learn how to configure, verify and troubleshoot: routers and switches, static routing, default routing, VLANs, and ACLs. Aligns to the second course of the Cisco Networking Academy CCNA curriculum. Prerequisite(s): OECS 261. Restricted to: Community Colleges only.

**OECS 263. Network Fundamentals. . . . . (4 cr.)**

Fundamentals of networking architecture, components, and operations including practical and conceptual skills using routers and switches. Student will learn how to configure, verify and troubleshoot static routing, default routing, VLANs, and ACLs. This course aligns to the third course of the Cisco Networking Academy CCNA curriculum. Prerequisite(s): OECS 262. Restricted to: Community Colleges only.

**OECS 264. Network Routing Protocols . . . . . (4 cr.)**

Fundamentals of routing protocols for troubleshooting advanced network operations. Covers common networking issues such as RIP,

OSPF, and EIGRP for IPv4 and IPv6 networks. This course aligns to the fourth course of the Cisco Networking Academy CCNA curriculum. Prerequisite(s): OECS 263. Restricted to: Community Colleges only.

**OECS 269. Network Security . . . . . (3 cr.)**

Fundamentals of design and implementation of network security solutions that will reduce the risk of system vulnerability. Prerequisite(s): OECS 207 or OECS 261 or consent of instructor. Restricted to: Community Colleges only.

**OECS 280. Desktop Publishing I . . . . . (3 cr.)**

Design and production of publication materials to fill the needs of business communities, using a microcomputer. Prerequisites: either BCIS 100G, C S 110, OECS 105. May be repeated for a maximum of 6 credits. Same as BOT 280.

**OECS 290. Computer Technology Capstone . . . . . (1-3 cr.)**

Refines skills learned in the OECS program. Culminates in a review and practice of advanced software applications. Restricted to majors. Prerequisite(s): (OECS 125 OR OECS 203) AND (OECS 185 OR E T 283). Restricted to: Community Colleges only.

**OEEM - PARAMEDIC**

**OEEM 101. CPR for the Health Care Professional. . . . . (1 cr.)**

Students learn identification and response to airway and circulation emergencies, including use of a SAED and accessing the EMS system. This course is taught using the American Heart Association guidelines for course completion. Required: grade of C or better.

**OEEM 115. First Responder Prehospital Professional. . . (3 cr.)**

Provides training in prehospital medical and traumatic emergencies. Prerequisite: Consent of instructor. Corequisite: OEEM 101. Requires a C or better to pass. Restricted to majors.

**OEEM 120. Emergency Medical Technician Basic . . . . . (6 cr.)**

Covers EMT-Basic skills instruction to include care of soft tissue and muscular/ skeletal injuries, circulatory, nervous, general medical and respiratory systems emergencies. Corequisite(s): OEEM 101 and OEEM 120L and OEEM 121, or consent of instructor. Prerequisite(s)/ Corequisite(s): BIOL 154. Restricted to: Community Colleges only.

**OEEM 120L. Emerg Medical Tech-Basic Lab . . . . . (2 cr.)**

EMT-Basic skills development with emphasis on assessment, skills competency and team-work in patient care in the prehospital setting. Corequisites: OEEM 101 or OEEM 120, and OEEM 121, or consent of instructor. Requires a "C" or better to pass.

**OEEM 121. EMT Basic Field/ Clinical . . . . . (1 cr.)**

Covers the patient care experience provided through assigned shifts in the hospital and/or ambulance setting. Corequisites: OEEM 101, OEEM 120, and OEEM 120L, or consent of instructor. Requires a C or better to pass.

**OEEM 122. EMT Basic Advanced Field/Internship . . . . . (2 cr.)**

Expanded patient care experience provided through practical scenarios, assigned shifts in the hospital and/or ambulance setting. Prerequisite: current EMT-basic license and consent of instructor. Requires a C or

better to pass.

**OEEM 150 L. EMT Intermediate Lab. . . . . (2 cr.)**

EMT-Intermediate skills development with an emphasis on assessment, skills competency, and team work in patient care in the prehospital setting. Requires a C or better to pass. Corequisite(s): OEEM 150 and OEEM 151. Restricted to: Community Colleges only.

**OEEM 150. EMT Intermediate. . . . . (5 cr.)**

Theory of the roles, responsibilities and scope of practice of the EMT-Intermediate. Assessment and management of respiratory, cardiac, trauma, environmental, behavior, reproduction, and childhood emergencies. Prerequisites: current EMT-basic license, pretest and consent of instructor. Corequisites: OEEM 150L and OEEM 151. Requires a C or better to pass.

**OEEM 151. EMT. Intermediate Field/Clinical . . . . . (2 cr.)**

Patient care experience provided through assigned shifts in the hospital and/or ambulance setting. Prerequisite: Consent of instructor. Corequisites: OEEM 150 and OEEM 150L. Requires a C or better to pass.

**OEEM 201. Human Pathophysiology. . . . . (3 cr.)**

Overview of anatomy and physiology. Emphasis on human body pathophysiology including a medical illness component. Restricted to majors. Requires a C or better to pass. Prerequisite(s): OEEM 120. Restricted to: Community Colleges only.

**OEEM 202. EMT – Paramedic I Respiratory Emergencies(3 cr.)**

Review anatomy, physiology and pathophysiology of the respiratory system. Assessment and management of respiratory emergencies and acute respiratory failure in the prehospital setting. Prerequisites: consent of instructor. Restricted to major. Requires a C or better to pass.

**OEEM 203. EMT – Paramedic II Trauma Emergencies (3 cr.)**

Study of the effects of trauma on the human body. Assessment and management of trauma patients and scenes, including vehicular extractions. Prerequisites: OEEM 202 and consent of instructor. Restricted to major. Requires a C or better to pass.

**OEEM 206. Introduction to Advanced Prehospital Care (3 cr.)**

Overview of prehospital care including roles and responsibilities of EMT-P, EMS systems, medical, legal, ethical issues, stress management, medical terminology, medical report writing and communication. Includes ride-along with ambulance and dispatch observation. Requires a C or better to pass. Restricted to majors. Consent of instructor required. Prerequisite(s): OEEM 120. Restricted to: Community Colleges only. Restricted to OEEM majors.

**OEEM 207. Introduction to Pharmacology. . . . . (3 cr.)**

Drug actions, factors modifying drugs and dosages: characteristics of drug effects and drug history and dosages. Prehospital protocol, transport, and common patient prescription medications. Restricted to majors. Requires a C or better to pass. Prerequisite(s): OEEM 120. Restricted to: Community Colleges only. Restricted to OEEM majors.

**OEEM 210. Cardiac Rhythm Interpretation. . . . . (3 cr.)**

Cardiac conduction system: electrophysiology electrocardiogram, monitor, atrial, sinus, ventricular and junctional dysrhythmias, multiple lead EKG and 12 lead EKG interpretation. Prerequisite(s): OEEM 203, OEEM 230, and OEEM 240. Requires a C or better to pass.

**OEEM 212. EMT – Paramedic Cardiovascular Emergencies (3 cr.)**

Review anatomy, physiology, and pathophysiology of cardiovascular system. Assessment and management of cardiovascular emergencies in the prehospital setting. Prerequisite(s): second semester standing in EMS program and consent of instructor. Requires a C or better to pass.

**OEEM 213. EMT - Paramedic Medical Emergencies I (3 cr.)**

Study of the disease process; assessment and management of neurological, endocrine, gastrointestinal, renal emergencies and infectious disease. Prerequisites: OEEM 212, OEEM 230 and OEEM 240. Requires a C or better to pass.

**OEEM 214 EMT--Paramedic: Medical Envir. Emergencies II (3 cr.)**

Study of disease process, assessment, and management of poisoning, drug and alcohol abuse, environmental, behavioral and geriatric emergencies. Prerequisites: OEEM 213, OEEM 230 and OEEM 240. Requires a C or better to pass.

**OEEM 216 EMT-Paramedic: Reproductive & Childhood Emerg. (3 cr.)**

Covers anatomy, physiology, disease processes, assessment and management of male and female reproductive system emergencies, childhood emergencies and growth and development. Restricted to majors. Requires a C or better to pass. Prerequisite(s): OEEM 214 and consent of instructor. Restricted to: Community Colleges only.

**OEEM 230 EMT-Paramedic Clinical Experience I . . . . (3 cr.)**

Assigned clinical experiences in patient assessment and specific management techniques. Successful completion includes minimum required hours and completion of course objectives. Prerequisite: consent of instructor. Restricted to majors. Requires a C or better to pass.

**OEEM 231 EMT-Paramedic Clinical Experience II . . . . (3 cr.)**

Assigned clinical experiences in patient assessment and specific management techniques. Successful completion includes minimum required hours and completion of course objectives. Prerequisites: OEEM 230 and consent of instructor. Restricted to majors. Requires a C or better to pass.

**OEEM 235. EMT Paramedic Clinical Experience III (1-3 cr.)**

Continuation of OEEM 231. Prerequisites: second semester standing in EMS program, OEEM 231, and consent of instructor. May be repeated for a maximum of 3 credits. Restricted to majors. Requires a C or better to pass.

**OEEM 241 EMT-Paramedic Field Internship I . . . . . (3 cr.)**

Continued focus on advanced prehospital skills and knowledge, with increasing responsibility for patient care. Successful completion includes meeting at least the minimum required hours and course objectives. Prerequisites: OEEM 240 and consent of instructor. Restricted to majors. Requires a C or better to pass.

**OEEM 243 EMT-Paramedic Preparation for Practice . . (2 cr.)**

Comprehensive final program testing to prepare for licensing examination. Prerequisites: OEEM 216 and OEEM 242. Restricted to majors. Requires a C or better to pass.

**OEEM 245, EMT Paramedic Field Internship III. . . . (1-3 cr.)**

Continuation of OEEM 242. Prerequisites: OEEM 242 and consent

of instructor. Restricted to majors. Requires a C or better to pass.

**OEET - ELECTRICAL TRADES**

**OEET 110. Basic Electricity and Electronics. . . . . (4 cr.)**

An introduction to electricity theory and practice, including electron theory, Ohm's law, construction of electrical circuits, direct and alternating currents, magnetism, transformers, and practical applications. Same as HVAC 102, ELT 105, OEPB 102.

**OEET 115. Wiring Methods and Materials . . . . . (5 cr.)**

Application of electrical code in selection of wiring materials; proper methods of installation. Corequisite: OEET 110 or consent of instructor.

**OEET 120. Basic Motor Controls. . . . . (5 cr.)**

Developing schematics and wiring simple manual and electromechanical control devices. Prerequisite: OEET 110 or consent of instructor.

**OEET 130. Intro. to Electrical Power Systems . . . . . (2 cr.)**

An overview of electrical power systems, equipment, safety practices, first aid and CPR. Prerequisite: acceptance into the electrical lineworker program. Corequisite: OEET 110 and OEET 131. Restricted to majors.

**OEET 205. National Electric Code. . . . . (3 cr.)**

Interpretation and application of the National Electric Code. Prerequisite: OEET 110.

**OEET 295. Special Topics . . . . . (1-6 cr.)**

Topics to be announced in the Schedule of Classes.

**OEGR - DIGITAL GRAPHICS**

**OEGR 221. Cooperative Experience I . . . . . (1-3 cr.)**

Student employed in approved work site; supervised and rated by employer and instructor. Each credit requires specified number of hours of on-the-job work experience. Prerequisite: consent of instructor. Restricted to majors. Graded S/U.

**OEMN - Facility Maintenance Technology**

**OEMN 100. Interior Building Maintenance . . . . . 4 cr.**

Skills and technical information about materials, processes, construction, maintenance, and repair for walls, ceilings, floors, doors, windows, locks, closures, and furniture. Interior coatings, basic electrical and plumbing repairs, and hand/power tools.

**OEMN 105. Intro to Building Trades/Maint. . . . . 4 cr.**

Basic safety; introduction to construction math, hand tools, power tools, and blueprints; basic rigging; and soft skills for the construction and maintenance industry. Same as OEAR 105.

**OEMN 110. Small Equipment Maint/Repair . . . . . 4 cr.**

Covers small engine theory, troubleshooting and repair, auto maintenance, hydraulic theory and repair lubricants, batteries and scheduled tool maintenance.

**OEMN 111. Basic Hydraulics . . . . . 3 cr.**

Hydraulic system safety and basic principles of hydraulics, including Pascal's Law and Bernoulli's Principle. Explains the function of fluids, parts, pumps, and motors. Prerequisite: OEMN 105 or consent of instructor.

**OEMN 112. Basic Pneumatics.** . . . . . 3 cr.  
Pneumatic safety, characteristics of gases and how they are compressed, pneumatic transmission of energy, and compressor operation. Prerequisite: OEMN 105 or consent of instructor.

**OEMN 115. Blueprint Reading** . . . . . 3 cr.  
Reading, interpretation, and revisions of industrial technical drawings common to manufacturing. Integration of engineering and related shop calculations. Introduction to computer-aided drawing of schematic diagrams. Prerequisite: OEMN 118 or consent of instructor.

**OEMN 116. Basic Machining**.. . . . 3 cr.  
Basic manufacturing processes. Familiarization with operation and maintenance of lathes, saws, drill presses, and milling machines. Prerequisite: OEMN 115.

**OEMN 120. Painting and Finishing Techniques** . . . . . 4 cr.  
Types and application of paints and clear coatings. Use of fasteners, adhesives, caulks, and sealants.

**OEMN 130. Carpentry Repair Tech.** . . . . . 4 cr.  
Tool safety, use and maintenance. Wood and related products, joinery, framing and blocking, jogs and fixtures, etc. Student will gain knowledge and skills for entry-level carpentry repair as a facilities maintenance technician.

**OEMN 200. Exterior Building Maint.** . . . . . 4 cr.  
Construction and repair of exterior walls, roofs, masonry, and signs. Concrete, asphalt and exterior paint repair considerations included.

**OEMN 209. Basic Electricity for Maint.** . . . . . 3 cr.  
Basic practical electrical safety. Introduction to VOM, power generation, distribution and application. Ohm's law with specific application. DC, AC single phase and AC polyphase characteristics, power sources and supply applications.

**OEMN 210. Elect Sys Troubleshoot/Repair** . . . . . 4 cr.  
Hands-on experience in electrical systems maintenance and repair. Use of VOM, electrical safety, codes and standards; motors, cable and wire types and grounding. Prerequisite: OEAR 102 or consent of instructor.

**OEMN 220. Plumbing/Climate Systems Maint** . . . . . cr.  
Selection, types, repair, and maintenance of heating and cooling systems, piping, ducting, valves, controls, swimming pools, and fountains.

**OEMN 221. Co-op Experience** . . . . . 1-3 cr.  
Supervised cooperative work program. Student is employed in an approved facilities maintenance operation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Prerequisite: consent of instructor. Graded S/U.

**OEMN 230. Facilities Maintenance Mgmt** 4 cr.  
Study of ethics, codes, regulations, scheduling, policy, and procedures. Employee supervision and effective communication techniques as related to facilities maintenance technology.

**OEMN 250. Mechanical Maint I** . . . . . 3 cr.  
Introduction to bearings, installation, removal and troubleshooting bearings; installing couplings and coupling removal procedures; belt and chain drives; function and installation of mechanical seals, gaskets, and

packing. Prerequisite: OEMN 105 or consent of instructor.

**OEMN 251. Mechanical Maintenance II** . . . . . 3 cr.  
Installing dynamic and static seals; pumps; troubleshooting and repair of gearboxes. Prerequisite: OEMN 105 or consent of instructor.

**OEMN 252. Alignment** . . . . . 3 cr.  
Conventional and reverse alignment; types of misalignment, aligning couplings using a straightedge and feeler gauge; adjusting face and OD alignment using a dial indicator; eliminating; coupling stress. Use of reverse dial indicator. Prerequisite: OEMN 105 or consent of instructor.

**OEMN 260. Landscape Management/Maint I** . . . . . 3 cr.  
Aspects of plant care from plant identification to scheduling fertilizer and water applications. Includes greenhouse management, landscaping, and use of related tools and equipment.

**OETS – TECHNICAL STUDIES**

**OETS 100. Industrial/Construction Safety** . . . . . (2 cr.)  
Covers safety issues such as PPE, BBP, ladder safety, RTK, HazCom, MSDS and information about safety organizations such as OSHA, NIOSH, NFPA, National Safety Council. Community Colleges only. Restricted to Dona Ana and Carlsbad campuses.

**OETS 102. Career Readiness Certification Prep.** . . . . . (1-3 cr.)  
This course is designed to prepare students to successfully obtain Career Readiness Certifications in all areas and at the appropriate levels for their program of study. Graded: S/U. Restricted to: Community Colleges only.

**OETS 118. Mathematics for Technicians** . . . . . (3 cr.)  
Analysis and problem solving of technical problems using measuring instruments and techniques of arithmetic, algebra, geometry, and trigonometry. Prerequisite(s): OETS 104 or CCDM 103N or appropriate placement test score. Restricted to: Community Colleges only.

**OETS 255. Special Topics Technical Studies.** . . . . . (1-6 cr.)  
Topics to be announced in the Schedule of Classes. Prerequisite(s): Consent of instructor. Restricted to: Community Colleges only.

**P E - PHYSICAL EDUCATION, RECREATION, AND DANCE**

**P E 103. Beginning Weight Training for Women.** . . . . . (1 cr.)  
Introduction to basic principles and techniques of weight training as related to women.

**P E 127. Cardio-Kickboxing.** . . . . . (1 cr.)  
Activities that mimic punches, blocks, and kicks which have been modified to serve the purpose of providing a cardiovascular workout.

**P E 128. Aerobic Dance.** . . . . . (1 cr.)  
Designed to increase knowledge of the human body's responses to exercise, enhance the level of muscular development, and cardiovascular endurance with the use of music.

**P E 129. Step Aerobics.** . . . . . (1 cr.)  
Designed to increase knowledge of the human body's responses to exercise, enhance the level of muscular development, and cardiovascular endurance with the use of music and steps.

**PE 145. Beginning Bowling** . . . . . (1 cr.)

Basic skills and methods in bowling.

**PE 150. Beginning Golf** . . . . . (1 cr.)

This is a beginning golf class. You will be taught the basic fundamentals of the golf swing, how to putt and chip, basic rules knowledge, how to play a round, and keep score.

**PE 173. Running Fitness** . . . . . (1 cr.)

Basic fitness knowledge techniques and training methods of fitness running are practiced and refined.

**PE 199. Yoga** . . . . . (1 cr.)

A holistic approach to exercise benefiting the body, mind, and spirit. Practices focus on alignment, strength, breath relaxation, and restoration.

**PE 204. Cross Training** . . . . . (1 cr.)

Intensive training program that incorporates both aerobic and resistive overload approaches to training.

**PE 205. Walking Fitness** . . . . . (1 cr.)

Basic fitness knowledge techniques and training methods of fitness walking are practiced and refined.

**PE 206. Beginning Physical Fitness** . . . . . (1 cr.)

Progressive exposure to steady state exercise tailored to individual needs for the purpose of determining, improving, and maintaining physical fitness.

**PE 215. Intermediate Walking** . . . . . (1 cr.)

A continuation of basic fitness knowledge techniques and training methods of fitness walking are practiced and refined. Prerequisite: PE 205 or consent of department head.

**PE 216. Advanced Walking** . . . . . (1 cr.)

Advanced walking fitness and training techniques are presented, practiced, and refined.

**PE 228. Intermediate Aerobic Dance** . . . . . (1 cr.)

Aerobic dance at a high intensity level with a more in-depth study of the body's physiological response to exercise. Prerequisite: PE 128 or consent of department head.

**PE 229. Intermediate Step Aerobics** . . . . . (1 cr.)

Step aerobic dance at a high intensity level with a more in-depth study of the body's physiological response to exercise. Prerequisite: PE 129 or consent of department head.

**PE 263. Outdoor Recreation Skills** . . . . . (1 cr.)

Selected outdoor activities. Appropriate subtitles, such as hiking and backpacking, camping and survival, hunting and gun safety, casting and angling skills. May be repeated for maximum of 4 credits.

**PE 270. Special Topics** . . . . . (1-3 cr.)

Specific subjects to be announced in the Schedule of Classes. Each offering will carry appropriate subtitle. May be repeated for a maximum of 4 credits.

**PE 299. Intermediate Yoga** . . . . . (1 cr.)

Continuation of introductory course focusing on meat cookery, Inter-

mediate training and skill techniques in Yoga. Prerequisite(s): PE 199 or consent of instructor.

**PHL S – PERSONAL HEALTH SCIENCE**

**PHL S 150G. Personal Health and Wellness** . . . . . (3 cr.)

A holistic and multi-disciplinary approach towards promoting positive lifestyles. Special emphasis is placed on major problems that have greatest significance to personal and community health. Topics to include nutrition, stress management, fitness, aging, sexuality, drug education, and others.

**PHYS - PHYSICS**

**PHYS 110G. The Great Ideas of Physics** . . . . . (4 cr.)

Conceptual, quantitative, and laboratory treatments of the great ideas and discoveries that have influenced lives and changed perceptions of nature, from Johannes Kepler's laws of planetary motion and Isaac Newton's and Albert Einstein's laws of motion and gravity to the modern concepts of the quantal structure of nature and the big bang universe.

**PHYS 211G. General Physics I** . . . . . (3 cr.)

Non-calculus treatment of mechanics, waves, sound, and heat. Knowledge of simple algebra and trigonometry is required.

**PHYS 211GL. General Physics I Laboratory** . . . . . (1 cr.)

Laboratory experiments in topics associated with material presented in PHYS 211G or PHYS 221G. Students wishing to use the PHYS 211G-212G or PHYS 221G-222G sequence to satisfy the basic natural science General Education requirement must register for either PHYS 211GL or PHYS 212GL. Prerequisite(s)/Corequisite(s): PHYS 211G or PHYS 221G.

**PHYS 212G. General Physics II** . . . . . (3 cr.)

Non-calculus treatment of electricity, magnetism, and light. Prerequisite(s): PHYS 211G or PHYS 221G.

**PHYS 212GL. General Physics II Laboratory** . . . . . (1 cr.)

Laboratory experiments in topics associated with material presented in PHYS 212G or PHYS 222G. Students wishing to use the PHYS 211G-212G or PHYS 221G-222G sequence to satisfy the basic natural science General Education requirement must register for either PHYS 211GL or PHYS 212GL. Pre/Corequisite(s): PHYS 212 or PHYS 222.

**PHYS 215G. Engineering Physics I** . . . . . (3 cr.)

Calculus-level treatment of kinematics, work and energy, particle dynamics, conservation principles, simple harmonic motion. Prerequisite(s): MATH 191G.

**PHYS 215GL. Engineering Physics I Laboratory** . . . . . (1 cr.)

Laboratory experiments associated with the material presented in PHYS 215G. Corequisite: PHYS 215G. Students wishing to use the PHYS 215G-216G sequence to satisfy the basic natural science general education requirement must register for either PHYS 215GL or PHYS 216GL.

**PHYS 216G. Engineering Physics II** . . . . . (3 cr.)

A calculus-level treatment of topics in electricity, magnetism, and

optics. Prerequisite(s): PHYS 213 or PHYS 215G and MATH 192G.

**PHYS 216GL. Engineering Physics II Laboratory . . . . . (1 cr.)**  
Laboratory experiments associated with the material presented in PHYS 216G. Prerequisite: a C or better in PHYS 213L or PHYS 215GL. Corequisite: PHYS 216G. Students wishing to use the PHYS 215G-216 sequence to satisfy the basic natural science general education requirement must register for either PHYS 215GL or PHYS 216GL.

**PSY - PSYCHOLOGY**

**PSY 201G. Introduction to Psychology.. . . . . (3 cr.)**  
Methods and principles of behavior. Topics include human evolution and development, biopsychology, perception, learning, thinking, motivation, social interaction, and the diagnosis and treatment of abnormal behavior.

**PSY 266. Applied Psychology . . . . . (3 cr.)**  
Explanation of the psychological principles of everyday living. Emphasizes motivation, learning of intelligent behavior, and applications of psychology to social issues. Community Colleges only.

**PSY 270. Special Topics . . . . . (1-3 cr.)**  
Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits. Community College campus only.

**S WK - SOCIAL WORK**

**S WK 221G. Introduction to Social Welfare . . . . . (3 cr.)**  
A broad overview of current social problems and the role of social agencies and community members in addressing these problems.

**S WK 251. Women s Issues in Social Work.. . . . . (3 cr.)**  
Examines gender-specific social problems and their identification and resolution through the use of social agencies and community resources. Community Colleges only.

**S WK 253. Case Management . . . . . (3 cr.)**  
Introduction to case management for social- and human-services workers. Overview of typical duties and responsibilities of a case manager, including setting goals, performing assessments, writing progress notes, and linking clients with other resources in the community. Recommended for students considering a career in social work or human services. Prerequisites: PSY 201G and S WK 221G. Community Colleges only.

**SMET - SCIENCES, MATHEMATICS, ENGINEERING AND**

**SMET 101. Intro. to Science, Math, Engineering, & Tech.(1 cr.)**  
An introductory course for science, mathematics, engineering, or technology students, emphasizing introduction to their disciplines. Development of critical thinking and academic success skills for technical disciplines, as well as degree planning for the major. Consent of Instructor required.

**SOC - SOCIOLOGY**

**SOC 101G. Introductory Sociology . . . . . (3 cr.)**  
Introduction to social theory, research, methods of analysis, contemporary issues in historical and cross-cultural contexts. Covers groups, deviance, inequality, family, gender, social change, and collective behavior.

**SOC 201G. Contemporary Social Problems. . . . . (3 cr.)**  
Introduction to the fundamentals of social analysis through the analysis of contemporary American social problems. Emphasis on methods of analysis and cross-national comparisons showing that the social problems studied are common to all societies. Covers racism, violence, poverty, crime, health care, and substance abuse.

**SOC 248. Special Topics. . . . . (1-3 cr.)**  
Specific subjects to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

**SOC 258. Current Issues in Marriage and Family . . . . . (3 cr.)**  
Examination of contemporary American family life, including courtship, marriage, divorce, and child rearing. Community Colleges only.

**SOC 262. Issues in Death and Dying . . . . . (3 cr.)**  
Major personal and social issues related to the process of dying in our culture. Community Colleges only.

**SPAN-SPANISH**

A language assessment is required for all students entering the Spanish program, including native speakers. To learn when and where to take the language assessment, see the Spanish listing in each semester's Schedule of Classes. Students may not receive credit for a lower level course which is a prerequisite to a higher level course for which credit has been received or which is being taken for credit. Exceptions must have prior approval by the Vice President for Student Services at NMSU Carlsbad.

**SPAN 111. Elementary Spanish I . . . . . (4 cr.)**  
Spanish for beginners. Not open to Spanish-speaking students except by consent of instructor. Prerequisite: language placement and assessment by departmental examination.

**SPAN 112. Elementary Spanish II . . . . . (4 cr.)**  
Spanish for beginners. Not open to Spanish-speaking students except by consent of instructor. Prerequisite: language placement and assessment by departmental examination or C or better in SPAN 111.

**SPAN 212. Intermediate Spanish II. . . . . (3 cr.)**  
Speaking, reading and writing. Not open to Spanish-speaking students except by consent of instructor. Prerequisite: language placement and assessment by departmental examination or C or better in SPAN 211.

**STAT - STATISTICS**

Students wishing to enroll in STAT 251G must satisfy one of the following: (a) have passed MATH 120 with a grade of C or better, or (b) have earned an adequate score on the Mathematics Placement Examination. (See the paragraph under MATHEMATICS course listings for further information about this exam.)



**STAT 251G. Statistics for Bus. and the Behavioral Sci. .. (3 cr.)**

Techniques for describing and analyzing data; estimation, hypothesis testing, regression and correlation; basic concepts of statistical inference. Prerequisite: MATH 120 (see note above.) Same as A ST 251G.

**SURG – SURGICAL TECHNOLOGY**

**SURG 120. Surgical Technology Clinical I. .... (2 cr.)**

This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. This course is designed to prepare the student to enter the surgical environment. This course provides an introduction to the operating room, observation of surgical procedures, direct participation in the preoperative (pre-op, intra-op, post-op) preparation of individual cases and professional roles and responsibilities of individual members of the surgical team. Direct supervision is provided by the clinical professional.

**SURG 140. Introduction to Surgical Technology. .... (4 cr.)**

This is an orientation to surgical technology theory, surgical pharmacology and anesthesia, technology sciences and patient care concepts and is designed to prepare the student to enter the surgical environment with entry-level knowledge necessary to understand patient responses to disease, illness, hospitalization, surgical procedures, commonly used pharmacologic and anesthetic agents, and legal, moral, and ethical issues that could .....be encountered in the surgical environment.

**SURG 145, Fund./Perioperative Concepts & Tech ..... (4 cr.)**

This is an in-depth coverage of perioperative concepts such as aseptic/sterile principles and practices, infectious processes, wound healing and creation and maintenance of the sterile field. This course is designed to prepare the student to enter the surgical environment with entry-level knowledge of aseptic technique principles and practices, the creation and maintenance of the sterile field including equipment, supplies, .....and instrumentation, and basic case preparation and procedures. An introduction to diseases and disease processes that may be displayed by the surgical patient and the patient's bodily responses to disease are also included.

**SURG 150. Surgical Procedures I. .... (4 cr.)**

This course is an introduction to surgical procedures and its related pathologies. Emphasis on surgical procedures related to the general, obstetrics/gynecology, genitourinary, otorhinolaryngology and orthopedic surgical specialties incorporating instruments, equipment. It is designed to prepare the student to function actively in the surgical environment with entry-level knowledge of surgical procedures. This course expands the basic foundation principles and combines the study of common surgical procedures to include anatomy, physiology and pathophysiology. Specific patient care concepts, medications, instrumentation, equipment, supplies and complications related to selected surgical procedures will be discussed.

**SURG 160, Surgical Procedures II ..... (4 cr.)**

This is an introduction to surgical procedures and related pathologies. Emphasis on surgical procedures related to thoracic, peripheral vascular, plastic/reconstructive, ophthalmology, cardiac and neurological surgical specialties incorporating instruments. The course is designed to prepare the student to continue to function actively in the surgical environment with entry-level knowledge of more complex surgical procedures. This course expands the basic foundation principles and combines

the study of complex surgical procedures to include anatomy, physiology, and pathophysiology. Specific patient care concepts, medications, instrumentation, equipment, supplies, and complications related to specific surgical procedures will be discussed. Realities of clinical practice and concepts of death and dying will also be discussed.

**SURG 230. Professional Readiness.. .... (2 cr.)**

This course transitions the student into professional readiness for employment, professional readiness for attaining certification and professional readiness for maintaining certification status.

**SURG 260, Surgical Technology Clinical II ..... (4 cr.)**

This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. Direct supervision is provided by the clinical professional. This course is designed to provide the student the opportunity to function actively in the role as a surgical technologist and health care team member in a clinical setting under the direct supervision of faculty and health care staff. Application of basic principles and practices combined with a supervised clinical experience participating in common surgical procedures is the focus.

**SURG 265, Surgical Technology Clinical III.. .... (3 cr.)**

This is a health-related work-based learning experience that enables the student to apply specialized occupational theory, skills, and concepts. This course is designed to provide the student the opportunity to function actively in the role of a surgical technologist and health care team member in a clinical setting under the direct supervision of faculty and health care staff. Refinement and application of basic principles and practices combined with entry-level employment competency expectations is the focus. Preparation for the National Certification Examination for Surgical Technologists is also ..... included.

**THTR - Theater Arts**

**THTR 101G. The World of Theater ..... (3 cr.)**

An appreciation class introducing the non-major to all aspects of theatre, including its history, literature and professionals. Students attend and report on stage productions.

**THTR 105. Acting for Non-Majors ..... (3 cr.)**

An introduction to basic performance techniques for non-majors.

**THTR 110. Acting I. .... (3 cr.)**

Basic understanding of self-expression through a variety of physical exercises, improvisation, and character study, culminating in scene or monologue work. Restricted to THTR majors.

**UNIV - University Studies**

**UNIV 101. Tutorial ..... (1-3 cr.)**

Development of specific skills required for college courses, such as note-taking, listening, and test-taking. To be taken in conjunction with a regular designated college course. May be repeated for a maximum of 3 credits. Graded S/U.

**UNIV 110. Personal Learning Skills I. .... (1-3 cr.)**

Individualized programs for self-improvement in skill areas necessary

for academic success in the university environment. Each course to bear an appropriate subtitle. May be repeated up to 3 credits. Graded S/U.

**UNIV 111. Personal Learning Skills II** . . . . . (1-3 cr.)  
Individualized programs for self-improvement in skill areas necessary for academic success in the university environment. Each course to bear an appropriate subtitle. Prerequisite: UNIV 110. May be repeated for a maximum of 3 credits. Graded S/U.

**UNIV 112. Academic and Personal Effectiveness** . . . . . (2 cr.)  
Learn academic self-analysis skills through the application of study and learning techniques to current course demands. Exposure to a variety of topics which enhance university and life-long learning.

**WELD - Welding Technology**

**WELD 100. Structural Welding I** . . . . . (6 cr.)  
Development of basic skills in SMAW, OFC, and OFW in accordance with the AWS entry-level welder program.

**WELD 101. Fundamentals of Welding** . . . . . (3 cr.)  
Set-up and adjustment of ARC and oxyacetylene equipment. Welding safety procedures and terminology. Skill development in laying weld beads with various patterns, positions, and processes.

**WELD 105. Introduction to Welding** . . . . . (3 cr.)  
Welding practices, procedures, and terminology. Welding safety, equipment types, electrode types in usage, joint design and testing procedures.

**WELD 110. Blueprint Reading (Welding)** . . . . . (3 cr.)  
Interpretation of prints related to welding. Emphasis on AWS standard symbols for welding, brazing, and nondestructive examination.

**WELD 115. Structural Welding II** . . . . . (6 cr.)  
Continuation of WELD 100. Emphasis on AWS entry and advanced level welder skills with SMAW, including all-position welding with mild and stainless steel electrodes. Plasma arc and air-carbon arc cutting, metallurgy, heat treatment, and weld defects. Prerequisite: WELD 100.

**WELD 125. Introduction to Pipe Welding** . . . . . (3 cr.)  
Pipe fit-up and welding techniques for pipe fitting and pipe weld joint using SMAW, GMAW, GTAW, and FCAW, 2G welding of pipe. Prerequisite(s): WELD 100, WELD 130, and WELD 140, or consent of instructor. Restricted to: Community Colleges only.

**WELD 126. Industrial Pipe Welding** . . . . . (3 cr.)  
Enhancement of WELD 125. Development of more advanced pipe welding skills. Prerequisites: WELD 110, WELD 130 and WELD 140. Corequisite: WELD 125.

**WELD 130. Introduction to GMAW MIG** . . . . . (3 cr.)  
Development of basic skills with gas metal arc welding (MIG) in accordance with AWS entry-level welder objectives. Wire electrodes, shielding/purge gases, and modes of metal transfer.

**WELD 140. Introduction to GTAW TIG** . . . . . (3 cr.)  
Development for basic skills with gas tungsten arc welding (TIG) in accordance with AWS entry/advanced welder objectives. Welding mild

steel, tungsten electrode preparation, filler wire selection, and equipment set-up.

**WELD 150. Pipe Welding II** . . . . . (3 cr.)  
Continuation of WELD 125; with fillet and groove welded joints in a horizontal fixed and 45-degree fixed positions (5-F, 5-G, 6-F, 6-G). Prerequisite: WELD 125.

**WELD 151. Industrial Pipe Welding II** . . . . . (3 cr.)  
Enhancement of WELD 150. Development of more advanced pipe welding skills. Emphasis on industry driven test. Prerequisites: WELD 125 and WELD 126. Corequisite: WELD 150.

**WELD 170. Welded Fabrication** . . . . . (3 cr.)  
Development of fabrication skills including basic layout, measuring, and utilization of various welding processes including out-of-position welding. Use of common shop tools. Prerequisites: WELD 100, WELD 110, WELD 130, and OEST 140 or OETS 118.

**WELD 180. GTAW II** . . . . . (3 cr.)  
Continuation of WELD 140. Development of more advanced GTAW skills. Emphasis on pipe welding with mild steel, stainless steel, and aluminum. Prerequisite: WELD 140 or consent of instructor.

**WELD 211. Welder Qualification** . . . . . (6 cr.)  
Laboratory and classroom instruction on AWS and ASME Welder Performance Qualification Tests. All position plate and pipe techniques and tests for SMAW, GMAW, GTAW, FCAW, and SAW. Nondestructive and destructive examination methods. Basics of welding codes. Prerequisites: OETS 104 or OETS 118; and WELD 100, WELD 110, WELD 120, WELD 130, WELD 140, WELD 160 and WELD 180 or consent of instructor. Restricted to majors.

**WELD 221. Cooperative Experience I** . . . . . (1-6 cr.)  
Supervised cooperative work program. Student is employed in an approved occupation and supervised and rated by the employer and instructor. Student will meet in a weekly class. Graded S/U. Prerequisites: WELD 100 or WELD 101 and consent of instructor. Restricted to majors.

**WELD 295. Special Topics** . . . . . (1-4 cr.)  
Topics to be announced in the Schedule of Classes. May be repeated for a maximum of 12 credits.

# Personnel

## Campus Executive Administrators

Gratton, Dr. John – Campus President, Ed.D., East Texas State University  
Nwanne, Dr. Andrew – CAO/Provost; Ph.D., University of North Texas  
Cleary, Mike – Vice President for Student Services; M.S.Ed., Eastern Illinois University

## Professional Staff

- Armendariz, Tracie – Tutor Coordinator, Learning Assistance Center, B.I.S., New Mexico State University
- Bingham, Tonya- Director Surgical Tech.; A.A., Torrent County College
- Campos, Diana – CC Director, Financial Aid; M.A., New Mexico State University
- Carnathan, Janice – Administrative Assistant, Special/ Executive, President’s Office, A.A., New Mexico State University
- Carrasco, Mario – Student Career Resources Coordinator, Counseling and Student Dev. Center; M.A., New Mexico State University
- Cordova, Sarah – Manager, Lab Instruction, M.A., New Mexico State University
- Davis, Valerie – Program Manager, Sr., Title V; M.B.A., New Mexico State University
- DeBlasis, Shelley – Director/Asst. Prof, Developmental Education; Ph.D., Illinois State University
- Estrada, Claudia – Professor/ Director of Nursing; M.S.N., University of Phoenix
- Eubank, Corey – Manager, Systems Administration; M.B.A., New Mexico State University
- Finley, William-Director, Institutional Analysis, M.S. , Lehigh University
- Fraser, Ida – Nurse Practitioner/Clinical Manager, Health Clinic, M.S., Texas Tech University
- Gadbury, Jeremy – Program Coordinator, Counseling and Student Dev. Center, B.B.A., New Mexico State University
- Ghadiali, Khushroo – CC Director, Marketing & Publications; B.A., New Mexico Highlands University
- Gomez, Bertha – Dual Credit Coordinator/Recruiter, B.A., Eastern New Mexico University
- Hernandez, Ashley – Tutor Coordinator, Title V; M.S., Eastern New Mexico University
- Hernandez, Ricardo – Lab Coordinator, Title V; B.S., Eastern New Mexico University
- Hernandez, Suzanna – CC Manager, Small Business Development Center M.A.A., University of Illinois
- Herndon, Brad – Business Office Manager, M.A., New Mexico State University
- Jasso, Bertha – CC Manager, Adult Basic Education; M.A., New Mexico State University
- Mahaffey, Lisa – Administrative Assistant, Sr., Business Office
- Moreno, Luz – Multi-Media Specialist, Learning Technology Center; B.B.A., New Mexico State University
- Neal, Jeff-Manager Facilities Services; B.S.B.A., New Mexico State University
- Olivares, Joe – Testing Coordinator, Assessment Services, B.S., University of Texas-El Paso
- Olsson-Dail, Nicole – CC Manager, Instructional Tech. Learning Tech. Center; M.Ed., American Intercontinental University
- Ramirez, Jade- Academic Advisor, Counseling and Student Development Center; B.S.C.J., New Mexico State University
- Roper, Susan – Financial Aid Advisor, VA Certifying Official, Financial Aid, B.B.A., Texas State University
- Sapien, Michelle - Administrative Assistant, Sr., Student Services Office
- Shields, Janice – Staff Nurse, Health Clinic; A.N., New Mexico State University
- Silva, Rebecca – HR Operations Unit Coordinator, President’s Office; B.B.A., New Mexico Highlands University
- Theragood, Merdia – Administrative Assistant, Sr., Campus Academic/Provost Office
- Thompson, Karla – CC Director, Counseling and Student Development Center; M.S., College of the Southwest

## Full-Time Faculty

- Al-Nouman, Jamil – Assistant Professor, Engineering, Ph.D., New Mexico State University
- Aryal, Pradip - Associate Professor, Mathematics, Ph.D., New Mexico State University
- Bickerstaff, Lynda – Professor, Nursing, M.S., University of Texas-El Paso
- Biebelle, Patricia – Instructor, English; M.F.A., University of Oregon
- Blankenship, Richard – Instructor/MSDP Program Manager, B.S., Herzing University
- Buckholz, Mark - Professor, English/Communication Arts; Ed.D., New Mexico State University; MFA, Yale University
- Chappa, Eduardo – Assistant Professor, Mathematics/Developmental Mathematics; Ph.D., University of Washington
- Christensen, Sam – Associate Professor, Multi-Media Technology; M.A., Golden Gate Baptist Theological Seminary
- De la Pena, Susana- Assistant Professor English; Ph.D. University of Arizona
- Dodson, Teri – College Instructor, Title V; M.S.N., New Mexico State University
- Girmus, Ronald – Associate Professor, Biology/Physics; Ph.D., University of Arizona
- Hamed, Jalal – Assistant Professor, Psychology/Sociology; Ed.D., Tennessee State University
- Hardin, Dianne – Instructor, Nursing; M.S.N., University of New Mexico
- Hartsock, Iris – College Assistant Professor, Nursing; B.S.N., New Mexico State University
- Hayes, Robyn – Associate Professor, Chemistry; M.S., University of Nebraska-Lincoln
- Jaco, Mary Ellen – Associate Professor, Nursing; M.A., University of New Mexico
- Josselet, Kenda – Assistant Professor, Government/History; M.A., West Texas A & M University
- Lee, Chang – Associate Professor, Spanish; Ph.D., University of California, Los Angeles (UCLA)
- Medina, George, College Instructor, Welding
- Nosakhere, Akilah – Director/Assoc. Prof, Library Services; M.L.S., Atlanta University
- Packer, Debra – Professor, Mathematics; M.A., Central Michigan University
- Pascal, Tiffany – Instructor, Multi-Media Technology; M.F.A., University of North Dakota
- Quintana, David – College Instructor, Automotive Technology, B.E.E.D., New Mexico State University
- Rayroux, Carolyn – Professor, Nursing; M.S.N., University of Phoenix
- Redford, David – Associate Professor, Criminal Justice; M.A., University of Illinois at Springfield
- Roper, Shannon – Associate Professor, Nursing, Associate Professor, Nursing; M.S.N., University of Phoenix
- Spencer, Philip – College Instructor, Welding; A.G.S.; New Mexico State University-Carlsbad
- Stallings, Thresa – Assistant Professor, Developmental English/Reading; Ed.D., University of Houston
- Strahan, Jon – Assistant Professor, Business; M.S., Arizona State University
- Titus, Pamela – College Instructor, Public Health; M.S.N., New Mexico State University
- Vacca, John – Assistant Professor, Criminal Justice/Psychology; Ph.D., Union Institute & University
- Wiedenmann, Richard – Associate Professor, Biology; M.S., Baylor University
- Zhao, Yaxi – Assistant Professor, Mathematics; Ph.D., University of Kentucky
- Zuniga, Debra – College Instructor, Nursing; B.S.N., New Mexico State University
- Zuniga, Gina – Associate Professor, Nursing; B.S.N., New Mexico State University

## Support Staff

- Barnes, Terry - Tutor, Learning Assistance Center
- Bernal, Lupe - Library Specialist, Library, A.G.S, New Mexico State University
- Biscaino, Rochelle – Administrative Assistant, General, Counseling & Student Development
- Bradshaw, Betsy – Administrative Assistant, Intermediate, Learning Assistance Center
- Byers, Lori – Help Desk Rep. Intermediate, Associate, Information Systems
- Cassels, Donald – Electrician, Physical Plant
- Cox, Judith - Administrative Assistant, Associate, President's Office
- Dahal, Sipra – Administrative Assistant, Associate, SBDC, A.A., Panjab University
- Fry, Gary - Inventory Control Clerk, Physical Plant, B.B.A., Eastern New Mexico State University
- Garcia, Annette - Financial Aid Specialist, Financial Aid
- Gibbs, Jeffrey – Custodial Worker, Sr., Physical Plant, B.P.E., New Mexico Highlands University
- Gibson, Jillian – Administrative Assistant, Associate, Nursing, B.E.C.E.D., McNeese State University.
- Gonzalez, Maria Elena– Admin. Assistant, Associate, Title V, B.B.A., New Mexico State University
- Gonzalez, Michael – Facilities Technician, Sr., Physical Plant
- Gonzales, Tamara, Fiscal Assistant Intermediate, Business Office
- Granger, Michelle – Custodial Worker, Sr., Physical Plant
- Illingworth, Suzanne – Facilities Technician, Senior, Physical Plant
- King, Keri – Lab Assistant, Information Systems
- Knox, Traci- Administrative Assistant Associate, Student Services
- Lactaen, Robert – Custodial Worker, Senior, Physical Plant
- Logan, Melissa – Fiscal Assistant, Intermediate Business Office
- Longoria, Linda – Administrative Assistant Associate, Adult Education
- Martinez, Rosalinda - Library Assistant, Library
- Mathis, Mandy - Administrative Assistant, General, Business Office, A.A., New Mexico State University
- Mendez, Cheryl – Administrative Assistant, General, Library
- Mendez, Sabrina – Supervisor, Custodian, Physical Plant
- Moralez, Isaac – PC Support, Sr., Information Systems
- Nichols, Jeannie – Financial Aid Specialist, Financial Aid
- Rios, Lorina – Administrative Assistant, Associate, Nursing
- Soto, Louriz – Classroom/Media Tech, Learning Technology Center, B.A., Texas State University
- Soules, Kathleen, Customer Service Assistant, Health Clinic

## Notes

## Notes





