

CRITERION 1. STUDENTS

For the sections below, attach any written policies that apply.

The following sections are outlined according to *University* (1), *College* (2), and *Department/Program* (3) requirements, where applicable.

A. Student Admissions

Summarize the requirements and process for accepting new students into the program.

A.1. University (NMSU 2017-2018 Undergraduate Catalog)

Requirements for admission as a first-time degree seeking student include the following:

- A formal application for admission, accompanied by a one-time \$20 non-refundable application fee.
- An official transcript with the student's high school credits is to be sent directly from the high school to the *Undergraduate Admissions Office*. Students who attended a college or university while in high school must request official transcript(s) sent directly to the *Undergraduate Admissions Office* by the *Registrar* of each college or any post-secondary educational institution previously attended, students may also hand carry the official sealed and unopened school envelope to our office.
- Official results of the *American College Testing Program* (ACT) or *Scholastic Aptitude Test* (SAT) are to be sent directly from the *Testing Centers* to the *Undergraduate Admissions Office*. All freshman applicants are required to submit scores from either the ACT or the SAT before a final admission decision is made.

Freshman Admission Requirements

Students who meet the minimum high school course requirements listed below must meet one of the following criteria to be admitted:

- Cumulative high school GPA of 2.75
- Ranked in the top 20 percent of their graduating class
- ACT composite score of 21 or SAT score* of 990 (SAT score of 1060 for new format)

*NMSU uses combined scores from the critical verbal and math portions of the SAT for admission and scholarship purposes. NMSU will be taking scores from the traditional SAT and the new SAT format, which was launched March 2016.

Note: All entering freshmen must submit official ACT or SAT scores before final admission is granted. ACT code 2638, SAT=4531

Minimum High School Requirements

Subject	Units
English	4*
Math	4**
Science	2***
Foreign Language/Fine Art	1

*Must include at least 2 units of writing intensive courses, one of which must be a junior or senior level course

**From Algebra I, Geometry, Algebra II, and one additional math course

***Beyond general science

Applicants who meet all the requirements listed above will be admitted to NMSU. An applicant who does not meet all the requirements may also be admitted if a review of their additional information indicates that the student might be successful at NMSU.

We encourage all students to apply for admission to NMSU. When reviewing the admissibility of students, we consider many factors, including high school GPA, test scores, dual-credit coursework, leadership experience, community involvement and other accomplishments. Applicants may be asked for additional information, including academic letters of recommendation, in support of their application.

NMSU’s admissions website also provides information and application instructions for GED, HISET, home-school, non-degree seeking, and re-admission students.

A.2. College of Engineering (NMSU 2017-2018 Catalog)

The College uses the *University Admissions Requirements*. In addition, the following procedures are enforced:

- For regular admission to the *University* and the *College of Engineering*, incoming freshman and transfer applicants must meet the University's qualifications for regular admission as stated in the undergraduate catalog in effect at the time of application. Students admitted to the *College of Engineering* will be classified by the college as a pre-major until the standard requirements described below for admission to the program major are met.
- Pre-major students will be admitted into their respective programs once they have met the following criteria:
- Earn a minimum grade of C- in the following courses:

Course	Title	Credits
CHEM 111G or CHEM 115	<i>General Chemistry I</i>	4
ENGL 111G	<i>Advanced ESL Composition</i>	4
ENGR 100	<i>Introduction to Engineering</i>	3
MATH 191G	<i>Calculus and Analytic Geometry I</i>	4
PHYS 213 or PHYS 215G	<i>Mechanics</i> <i>Engineering Physics I</i>	3

Any of the above courses with earned AP credit (minimum score of 3) is exempt from the list. Transfer students may meet this criteria with determined passing credit of equivalent courses. Pre-major students will be advised by the *Center for Academic Advising and Student Support* (CAASS).

NMSU’s *College of Engineering* reserves the right to independently test any student’s English proficiency upon arrival, including those who have earned scores satisfying minimum admission criteria. If the demonstrated level of English proficiency is not sufficient for academic success as determined by the *Center for English Language Programs*, support classes may be required to improve proficiency prior to admission.

A.3. Engineering Physics (EP) Program

The *Department of Physics* uses no additional admission requirements for the admission to the Engineering Physics (EP) program beyond the *University and College Admission Requirements*.

B. Evaluating Student Performance

Summarize the process by which student performance is evaluated and student progress is monitored. Include information on how the program ensures and documents that students are meeting prerequisites and how it handles the situation when a prerequisite has not been met.

B.1. University

Student Performance Assessment

Individual student performance and learning outcomes in a course are measured and evaluated by the course instructor and reported to the student in the form of grades. Each instructor has the authority to establish assignments and other assessments (such as exams and quizzes) and to assign grades based on the student's performance on those assessments. Final grades for the course are determined by the instructor and reported to the *University Registrar* as described in the grading section of this catalog. Any student who believes that their academic performance has been evaluated unfairly may appeal the grade through the *University's Academic Appeals Process* as provided in the Undergraduate Catalog.

Midterm and Six-Week Early Performance Grades

A *Six-Week Early Performance Grade* (sometimes referred to as *Midterm Grade*) for courses numbered 100-299 will be posted and made available to students through the MyNMSU portal. The purpose of the early grade posting is to ensure that students have an opportunity to address any performance issues. Students should be mindful that the *Six-Week Early Performance Grade* reflects a student's performance on only that portion of the total coursework that has been graded at that time. Any student who is doing poorly, or not as well as they would like, should meet with the instructor to discuss how they can improve. Students who have concerns about their progress in multiple courses or who are considering withdrawal from course(s) must meet with their academic advisor.

In courses numbered 300 or higher, the posting of *Early Performance Grades* is optional and may occur through the online course management system rather than the MyNMSU portal. However, prior to the last day to withdraw from a course, upon request, instructors will provide information to students about their progress in the course.

Undergraduate Academic Standing

When a student does not maintain adequate academic standing, he/she is placed on *Academic Warning*. If the student's academic standing does not improve, the placement progresses to *Academic Probation I*. Continued unimproved academic standing moves a student into *Academic Probation II*, then finally, *Academic Suspension*. Each stage imposes more structure and limitations on the student to help them 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.

Undergraduate *Academic Warning*

This is issued only once, the first time a student's cumulative GPA falls below a 2.0, while in good academic standing. The relevant *Associate Dean for Academics* or *Campus Academic Officer* (CAO) will send the students a letter detailing the consequences should their cumulative grade point remain below a 2.0 after the semester. A student on *Academic Warning* remains eligible for all extracurricular activities as governed by the rules of the specific activity.

While under *Academic Warning* the following restrictions apply:

- The student may be required to enroll in a 3-credit hour special study skills/time management course specifically designed for students on *Academic Warning*, or an equivalent course approved by the appropriate *Associate Dean* or CAO of their campus.
- Students will be required to enter into a contract with their advisor- approved by their *Department Head* that places 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 improve their GPA.
 - Except for the special study skills/time management course, the student's coursework may be restricted to their 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 credit hours a student may register for may be restricted (due to extenuating circumstances such as the student's workload commitments).

The *Associate Dean* or CAO 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 good academic standing.

Undergraduate *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 after 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:

- The student cannot enroll in more than 13 hours of coursework during the semester. *Note: Students falling below 12 credits in any one semester will jeopardize their financial aid and/or scholarships* (for example, the *NM Lottery Scholarship* requires a minimum of 15 credits). Should this occur, students should see the *Associate Dean* in their college as soon as possible to try to implement corrective measures.

- The student will enter into a contract or individualized education plan with their advisor and approved by the *Associate Dean* or CAO that place further stipulations on *Academic Probation I*. The *Associate Dean* or CAO may place the student on *Academic Probation II* or *Academic Suspension* should the student not adhere to the stipulations of the contract.
- Students on *Academic Probation* receiving educational benefits from the *Veterans' Administration* must obtain counseling from the *Military & Veterans Programs Office*.
- Students admitted under special provisions whose transcripts indicate less than a 2.0 GPA are admitted on *Academic Probation I*.
- 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 good academic standing. Until the transition happens the student remains on *Academic Probation I*. The student will be placed on *Academic Probation II* if he/she is unable to maintain a 2.0 semester GPA, and the cumulative remains below a 2.0 GPA, while under *Academic Probation I*. A student on *Academic Probation I* remains eligible for all extracurricular activities as governed by the rules of the specific activity.

Undergraduate *Academic Probation II*

Academic Probation II is issued in two ways.

- The first is when a student falls below a semester 2.0 GPA and the cumulative GPA remains below a 2.0 while on *Academic Probation I*.
- The second is when a student maintains a semester GPA greater than 2.0 while on *Academic Probation II* but the cumulative GPA is still less than 2.0.

The following restrictions are in place for student's in *Academic Probation II*:

- The student cannot enroll in more than 7 credit hours of coursework during the semester.
- As with rule 2 under *Academic Warning* and *Academic Probation I* and at the discretion of the *Associate Dean* or CAO, the student will be required to enter into a contract with their advisor, approved by the *Associate Dean* or CAO, to place further stipulations on *Academic Probation II*.
- The *Associate Dean* or CAO 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 they are placed on good academic standing. A student unable to maintain a semester GPA of 2.0 or higher, and the cumulative remains below 2.0 GPA, while under *Academic Probation II* will be placed on *Academic Suspension*. A student on *Academic Probation II* remains eligible for all extracurricular activities as governed by the rules of the specific activity.

Continuing in *Probationary Status*

Students may continue to enroll while on *Academic Probation I or II* - provided they maintain a semester GPA of 2.0 or higher. If they withdraw from the university while on *Academic Probation*, they can be re-admitted to the university at the same level of *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:

- A transfer student may not remove probation by summer work alone;
- 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;
- 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 GPA of 2.0 or higher, and the cumulative remains below a 2.0 while under *Academic Probation II*, they are 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 *Provost* or designee to be removed from *Academic Suspension*. At that time, the suspension status will be evaluated for possible removal. Should the suspension be lifted, the student is placed on *Academic Probation II* until the cumulative GPA equals or exceeds a 2.0. At the discretion of the *Provost* or designee, the student will enter into a contract approved by the *Provost* or designee and the student's *Dean* or CAO, 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 (see Readmission - Degree Seeking). Credits earned at another university or college while under *Academic Suspension* from NMSU or another university or college will be accepted at 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.

B.2. College of Engineering

Starting in Fall 2015, the *Freshman Year Experience (FYE) Program* implemented a structured intervention program based on students' six-week performance grades. The *College of Engineering* relied on the ENGR 100 peer mentors to execute the structured intervention plan and in Fall 2016 data was collected on the overall success of the peer mentor academic interventions. Once the six-week performance grades are posted, the mentors are provided with a list of the mentees who are considered "at-risk". Students who have at least one grade of C or below are required to attend an "intervention session" with their peer mentor. A student who has two C's or grades below are required to see their peer mentor once a week for two weeks, a student with three C's or below is required to see their mentor once a week for three weeks. The program manager conducts training for the mentors to discuss their role in implementing an intervention for their mentees. Mentors first schedule an appointment with the mentee to discover the root cause of the low performing grade. Once the mentor and mentee determine the root of the problem they develop a success plan. Mentors are also required to document the type of interaction they have with their mentee and make judgements about the progress of their mentees. Mentors provide academic tutoring, academic advice, college adjustment recommendations, and much more during their intervention sessions.

The results from the interventions were very positive. For example, there was a total of 49 students who were urged to meet with their mentors for an intervention within a few days after risks were

identified. Out of the 49 students, 36 met with their mentors and 89% of those students saw a grade improvement from their six-week performance grade to their final grade. In addition, 67% of the students met with their mentor two or more times and 92% of those students received a higher final grade, i.e. the more frequently a mentee met with their mentor the more likely they were to improve their final grade.

B.3. Engineering Physics (EP) Program

Monitoring Student Progress

The *EP Program* evaluates student performance by measuring Student Outcomes as defined in *Criterion 3 – Program Outcomes*. Documentation of continuous improvement based on evaluating program outcomes can be found in *Criterion 4 – Continuous Improvement*.

NMSU utilizes a software package called *Student Academic Requirements (STAR)* as the main advising tool to track student progress. STAR provides up-to-date progress monitoring and degree audits that can be accessed by each student individually and their advisors and staff members who have been granted access. All degree programs offered by the *Department of Physics* (including EP) are available on STAR. An example of a STAR audit for one of our current EP student (with name and student ID blacked out) is provided in *Appendix E – Supplementary Documentation*.

Using STAR, students and/or advisors select the appropriate college (and campus), major, and an appropriate catalog year. STAR audits are placed into the queue and are typically completed in minutes. Each audit provides a detailed list of completed courses and open requirements. STAR provides a detailed summary of student performance, including GPA, individual course grades (both, within and outside of the student's major), and an itemized list of satisfied or unsatisfied requirements. STAR also provides a list of courses that still need be taken toward graduation, if applicable. Once approved, substitutions, exceptions, or waivers are also reflected in STAR.

An additional advising tool for EP students is the flowcharts for each concentration, which are shown in *Criterion 5 - Curriculum*. The flowcharts visually show a proposed schedule for degree completion in 4 years, including all pre-requisite and co-requisite requirements for each course. The flowcharts are used to guide the student through the degree program and provide them with a list of the courses required, as well as which course sequence is recommended.

Meeting Pre-requisites

NMSU uses a system called *Banner* for student enrollment into courses. This software has a built-in list for making sure students have met the proper pre-requisite requirements to take a course. The pre-requisite lists are prepared by respective departments and submitted to the *Registrar's Office*, where they are entered into the degree-program database. If a student attempts to register for a course for which he/she has not met the pre-requisite requirement(s), *Banner* will reject the registration for the class and notify the student that pre-requisite requirements are not met.

On occasion, the request to waive a pre-requisite is unavoidable and a student will request a waiver for the pre-requisite. For example, it happens that a transfer student may need to have a pre-requisite requirement removed or a student could not take the pre-requisite in a timely fashion because of time conflicts with other classes in the previous semester(s). Students are encouraged to talk to their advisor to explore all possible alternatives. If a pre-requisite waiver is indeed necessary, the students or the advisor can petition the instructor to waive pre-requisite requirements for a course.

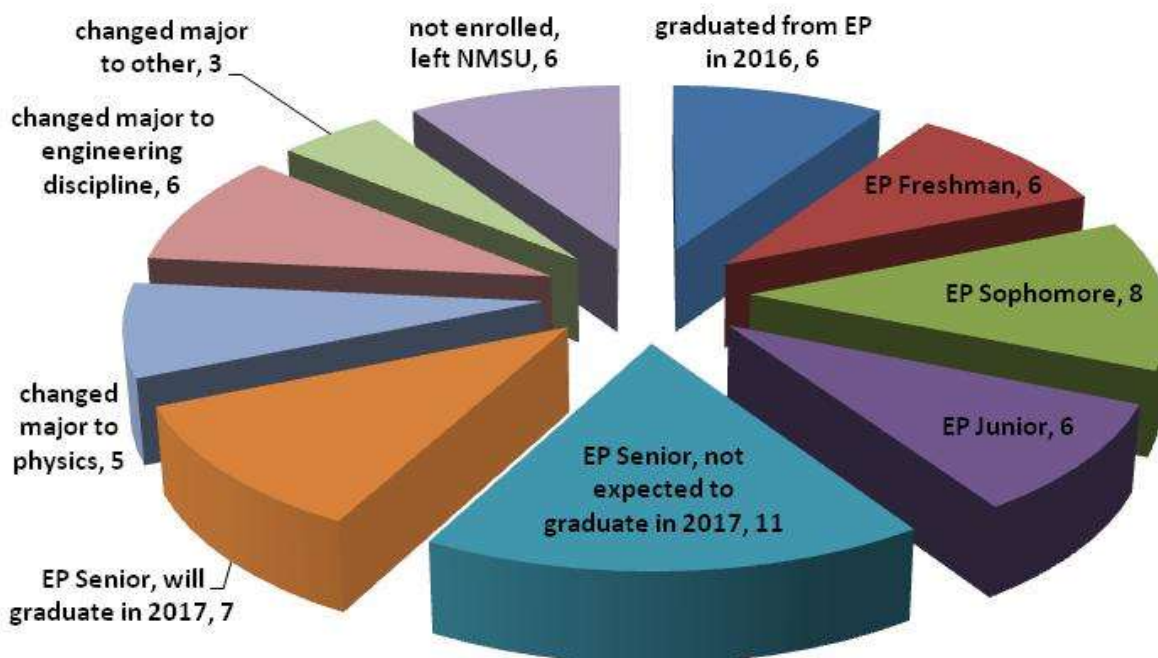
Retention

There are two student societies in the *Department of Physics*: The *Society of Physics Students* (SPS) and the *Society of Engineering Physics Students* (SEPh). Both societies are provided with space in the *Department of Physics* building (*Gardiner Hall*) and the *Department* host and support many of their activities. The current *President of SPS* is Sean Tierney, and the current *President of SEPh* is Juan Treto. In addition, each society has three faculty advisors (SPS: Drs. Cooper, Fohtung and Waszek, SEPh: Drs. DeAntonio, Kiefer and Nakotte), at least one of whom participates in their weekly meetings throughout the semester. Both societies play an instrumental role in the *Department's* retention efforts, and they are also involved in many of the *Department's* recruitment activities.

The *Department of Physics* holds annual meetings involving all faculty members to discuss the progress of every undergraduate student enrolled in the department, including EP. Students that are 'in trouble' (failing grades, inadequate course enrollments, or similar) are contacted individually by their respective advisors, who discuss with those students how to best approach and correct their individual situation.

The *EP Program Committee* keeps track of previously enrolled EP students who transfer to a different program or withdraw from the university and tries to contact them to understand what led to the student's decision to leave the program. Such information is used as additional input for improvement of the overall program. Diagram 1.1. shows an example of retention data prepared for the *Engineering Physics External Advisory Board* (see *Criterion 2 – Educational Objectives*) meeting in Spring of 2017. Of the 64 students that were enrolled as EP at any time between *Fall of 2015* and *Spring 2017*, 44 students (69%) either graduated or were still in EP in Spring of 2017.

Diagram 1.1. Classification and Retention Statistics of EP students between *Fall of 2015* and *Spring of 2017*, as presented to the 2017 *Engineering Physics External Advisory Board* (EPEAB). The student numbers for each category are provided in the chart.



C. Transfer Students and Transfer Courses

Summarize the requirements and process for accepting transfer students and transfer credit. Include any state-mandated articulation requirements that impact the program.

C.1. University (NMSU 2017-2018 Catalog)

NMSU evaluates eligible courses for NMSU transfer equivalency from postsecondary institutions that are regionally accredited or are candidates for regional accreditation. Credits from non-accredited institutions may be evaluated after the student has shown acceptable performance at NMSU for two semesters of full time enrollment.

Transfer students are subject to the same graduation requirements as all NMSU baccalaureate-degree (Bachelor's) seeking students. NMSU requires that 30 of the last 36 credit hours for every degree to be awarded must be earned at NMSU.

Community/Junior College Transfers

Community/junior college transfer students may be admitted and classified based on acceptable credits earned at a two-year institution. However, transfer students are subject to the same graduation requirements as all NMSU-Las Cruces campus baccalaureate seeking students. This includes the required minimum number of 48 upper division credits from courses numbered 300 or above and the requirement that the last 30 of the last 36 credits be earned through NMSU.

Note: Students currently enrolled at a NMSU Community College (Alamogordo, Dona Ana, Carlsbad or Grants) are not considered transfer students. If a student wants to change campuses they must submit a Change of Campus form.

Transfer Students- Admission Requirements

Transfer students must provide official transcripts sent directly from the *Registrar's Office* of each previously attended institution to the *NMSU Admissions Office*. Official transcripts will only be accepted if delivered in a sealed envelope from the granting institution and with a current issue date. Official transcripts must be received before the date of registration.

- Students who have not yet earned credit for the first-semester English course may be required provide ACT or SAT scores directly to the *NMSU Admissions Office*.
- Students with 30 or more college credit hours must have a cumulative grade point average (GPA) of at least 2.0.
- Students with 29 or fewer college credit hours must fulfill the freshman admission requirements and have an overall college GPA of at least a 2.50.
- Students must be eligible to return to their last college or university.
- Any student who conceals the fact that he/she has attended another college or university and has not submitted a transcript for each institution-whether or not credit was earned-will be subject to immediate suspension.
- NMSU will uphold academic and judicial suspensions from other colleges and universities.

General Requirements for Transfer Credits

Credit will be awarded for transfer courses as follows:

- Grades earned in courses taken at other institutions are not included in the calculation of the NMSU GPA, except for grades earned by approved *National Student Exchange* students.
- A grade of D or better is required to receive NMSU credit for courses identified as having an NMSU equivalent.
- Colleges or departments may require a grade of C- or higher for courses required in their programs.
- Any lower-division course from another institution receiving transfer credit from NMSU at the 300 or above level will be evaluated on a case-by-case basis.
- Each college determines which transferred courses are applicable toward a degree or a minor.

Transcripts may need to be reevaluated when students transfer from one NMSU campus to another. Currently enrolled students who do not receive a passing grade for a class taken within the NMSU system can receive transfer credit for the course taken at an outside institution. However, the student may not receive the credit for the equivalent NMSU (system) course.

Student Responsibility

Planning for effective transfer with 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 coursework will meet the requirements of the desired degree.

NMSU maintains a database on transfer equivalency of commonly transferred courses from numerous institutions. Courses included in the database at the time the student is admitted to NMSU will automatically transfer to NMSU, provided the student follows all guidelines. If a transferred course does not exist in the database, it is the student's responsibility to provide the departmental faculty with sufficient materials (e.g. catalog description, syllabi, etc.) to determine if any of the department's courses may be equivalent to the credits being transferred.

Evaluation of Transfer Credits

NMSU has 3 levels of course credit transfer. Once a student has been admitted to NMSU, they are awarded credit for equivalent courses accordingly. Following award of credit as described in *Levels 1* and *2* (below), application of any additional credit transfer *via* specific *Program Articulation Agreements* will be approved by the student's academic department and *Dean*, including additional courses in the major that may count toward a degree or a minor but are not included in a Program Articulation.

Level 1

This level entails automatic course-to-course equivalency credit transfer from colleges/universities in the *State of New Mexico*, per the *New Mexico Higher Education Department* (NM HED) articulation modules. Eligible credits for Level 1 transfers will be automatically applied to the student's transcript, provided minimal grade requirements are met. Level 1 equivalency includes

- *New Mexico State Common Core* general education courses

- New Mexico State articulated academic programs (e.g. Business, Early Childhood Education, and NM Nursing Education Curriculum).

Level 2

This level entails faculty-established NMSU course-to-course equivalency transfer:

- Equivalency is determined by designated departmental faculty in the department/program in which the equivalent course is offered, and may include review of course description, syllabus, and/or interaction with the other institution. If a course equivalency does not exist in the database, it is the student's responsibility to provide departmental faculty with sufficient materials to determine if any of the department's courses may be equivalent to the credits being transferred.
- Credit for courses transcribed with NMSU equivalency will count toward the degree/major.
- Credit for courses with no NMSU equivalence will be transcribed as 100E (lower level) or 300E (upper level) and may or may not count as credit toward a specific degree. Departmental faculty may accept the "E" course as elective credit toward the degree, or as substituting for a course not applied universally.

Level 3

This level entails specific *Program Articulation* between an NMSU program/department and a program/department at another institution.

- *Program Articulation* with other institutions is monitored at the department/program level in accordance with articulation agreements, and may include credit transfers that are applicable only to the specific degree articulated (i.e. credit for courses may change depending on degree student declares).

Because *Level 3* transfer credit is degree specific, transcripts must be re-evaluated when a student changes their major or college - *Level 3* transfer credits are not applied universally.

C.2. College of Engineering

In addition to the above, the college enforces the following transfer credit policy:

- Policy for engineering majors enrolling in courses at other institutions to meet *College of Engineering Departmental Core Requirements*¹.
- NMSU *Policy Manual* Chapter 6, section 89, paragraph A. "The decision to award a student credit for work completed at another institution rests with the faculty."
- NMSU main campus engineering majors may take core classes at other institutions of higher education to meet NMSU *College of Engineering Departmental Core* if the NMSU core course cannot accommodate any more eligible students.

The following conditions and restrictions apply to any course not taken on the NMSU main campus:

- The department must approve the course prior to enrollment (student to provide course syllabus and any other documentation to the *Department Head*).
- The course must be a class in a program that is accredited by an accreditation commission of ABET, Inc. and cannot be graded S/U.

- The course must be substantially the same as the equivalent NMSU class and the student must have satisfied all NMSU prerequisite requirements.
- The student shall provide a corresponding course syllabus and any other documentation required.
- If NMSU prerequisite requirements are not satisfied, credit will be denied regardless of a passing grade for the course at the other institution.

In addition to the above conditions, the following conditions apply to any on-line course not taken from the NMSU main campus:

- Scheduled exams, if any, shall be proctored².
- If NMSU prerequisite requirements are not satisfied, credit will be denied regardless of a passing grade for the course at the other institution.

¹ Core requirements are defined as required departmental, discipline-related, courses within the major.

² The student may take a proctored exam administered through NMSU Distance Education.

C.3. Engineering Physics (EP) Program

There are no specific transfer requirements for the EP Program.

D. Advising and Career Guidance

Summarize the process for advising and providing career guidance to students. Include information on how often students are advised, who provides the advising (program faculty, departmental, college or university advisor).

D.1. University

The University implemented *Central Advising* through the *Center for Academic Advising and Student Support (CAASS)* starting with the Fall 2017 advising period for Spring 2018 classes. CAASS has currently approximately 40 advisors working on behalf of a college team. Prior to each semester, CAASS places an advising hold into the student's *Banner* accounts to ensure that all students meet with an advisor to make the most educated decisions about upcoming semester course selection and long-term degree planning. Although CAASS oversees all advising activities and the removal of advising holds for students from their freshmen to their senior years, for majors enrolled in small programs with complex curricula, CAASS advisors may lack the background and understanding of curricular issues and alternative approaches used to determine the best track toward graduation for individual students. This is the case for our EP curriculum, which vastly differs for the four concentrations and therefore often requires individual course scheduling, course substitutions, and similar. CAASS and the *Department of Physics* therefore agreed to place a departmental advising hold for continuing EP students in good standing, and those students are required to meet with departmental advisors instead (see D.3). All students meet with their academic advisor at least once a semester to stay on track toward completing their academic career and achieving their personal goals while attending NMSU. New freshmen and transfer students, undecided or exploratory students, pre-majors (e.g. pre-nursing, pre-social work), students with less than a 2.5 GPA, student athletes, and students whose GPA is less than that required for their designated major will have an academic advising hold with CAASS. EP students not included in

the categories above will have a departmental advising hold with the *Department of Physics* (see D.3).

D.2. College of Engineering

The *College of Engineering* does not generally provide any additional formal advising and career guidance for declared engineering majors, in addition to those provided by the CAASS and the departmental programs.

D.3. Engineering Physics (EP) Program

The departmental advising hold prevents continuing EP students from registering for classes until they have been advised by the department. Once the students have been advised, the advising hold is removed and the students will be able to register.

Advising begins with required *Aggie Welcome Orientation* (AWO) for freshmen in the summer before the start of their first semester at NMSU. During the orientation, the students will be given an overview of the university and university life and take the *Math Placement Exam* (MPE). Typically, they also meet with an EP Advisor to discuss the concentrations of the *EP Program* and to place them in the correct classes in their starting semester.

Students often arrive with deficiencies in english and math. Based on SAT and ACT english scores, students may be required to take remedial english courses, if necessary. All NMSU students are required to take at least two college-level english courses. Similarly, math placement is based on SAT or ACT scores and/or a *Math Placement Exam* administered by the *Department of Mathematics*. The EP curriculum presumes students begin in *Calculus I* (MATH 191) during their first semester. Students who are not prepared to start at the calculus level will often take preparatory math courses, chemistry, and/or general education courses during that transitional period. Those students generally take longer than other students to complete their degrees. Occasionally, departmental advisors try to meet the challenge of keeping these students interested and involved in the *EP Program* by placing them into 100-level physics courses.

Throughout their program, all students enrolled in EP have an assigned *EP Advisor*, who typically meets in person with one of his/her advisees at the end of each semester for a progress review and advising of the upcoming semester. Advising duties for the *EP Program* are currently shared between Drs. Tom Hearn, Heinz Nakotte and Steve Pate. The *Chair of the EP Program Committee* will send e-mail reminders to students who forget to arrange for a meeting with their advisor. Advising holds will be removed only after the student has met with their assigned advisor. Advising for course enrollment in the upcoming semester entails the following steps:

Advising Step 1 – Collect relevant registration materials

- access to the student's most current STAR audit transcript
- a list of relevant classes and their schedules (in catalog);
- a list of *Viewing a Wider World* courses (in catalog);
- a list of *New Mexico General Education Common Core* courses in the undergraduate catalog under which the student plans to graduate; and
- a plan of course schedules up to graduation (flow chart)

Advising Step 2 – Draft a schedule

- use the pre-requisite flowchart to check pre-requisites and co-requisites and identify long course sequences that can affect the number of semesters required to complete the degree program
- be aware that some core courses are not offered every semester
- choose humanities and social science electives from the list of approved courses, such that they satisfy both *NMSU's General Education Requirements* and the *New Mexico General Education Common Core*

Per semester, a typical student course load is 16 credits. The university has a maximum credit load of 18 that can only be exceeded by petition. Only under exceptional circumstances will the *Department of Physics* allow this.

Advising Step 3 - Removal of Advising Hold and Class Registration

Once the student has met with his/her advisor, the EP Advisor will inform *Head of the Department of Physics* that the advising hold can be removed. This can be done either by the *Head of the Department* directly or through CAASS. After that, the student is cleared for on-line course registration. Alternatively, students may register by taking their signed course request card to the *College of Engineering* in Goddard Hall, Room 106.

EP Advisors keep track of the progress for each individual EP student advisee, and they are encouraged to fill out an *Advising Form* on any advisee/advisor interaction. The *Advising Form* has space for advisor notes, course substitutions, and an area for action items that require immediate attention.

Initial Mathematics and English Placement

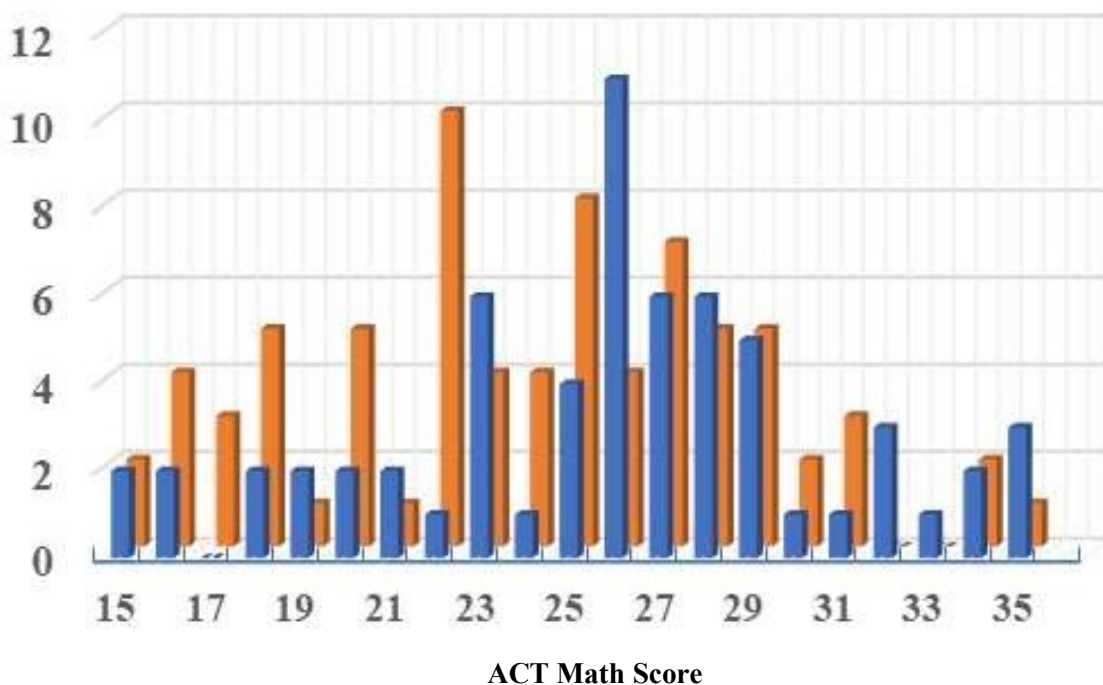
Initial placement in Math and English for all majors at NMSU is determined by a combination of high school GPA and ACT/SAT score, high school AP *Math Course Scores* and/or by performance on the *Math Placement Exam* (MPE) offered by the *Department of Mathematics*. Diagram 1.2 shows the results of a survey of the ACT *Math Scores* for freshman entering the physics and EP Program between 2010 and 2015. During that period, the average ACT *Math Score* for physics freshman was 23.9 and for EP 25.8; both of which are well above the average ACT *Math Score* of NMSU incoming freshman overall. This provides an indicator of better than typical math skills of the program's incoming freshman.

Diagram 1.3 shows the *Math & English Placement Grid* used for incoming freshman at NMSU. Between 2010 and 2015, ~62% of EP majors and ~39% of physics majors would have been placed into MATH 191 (Calculus I) or higher, provided their high-school GPA was above 2.75. Students with lower ACT (or SAT) *Math Scores* may still place into higher-level math courses, if they passed AP *Calculus* or scored high enough on the MPE during the AWO.

ENGR 100

ENGR 100 is a required course for all engineering majors. The course was introduced in 2014 to increase retention of students in the *College of Engineering*. ENGR 100 provides a general overview of different engineering disciplines and it provides a first exposure to engineering approaches and its tools. Another goal of *ENGR 100* is the formation of student cohorts

Diagram 1.2. ACT Math Scores of Incoming Freshman in Engineering Physics (blue) and Physics (orange) from 2010 to 2015. The maximum possible score is 36.



Alternative Introductory Physics sequence

EP students typically take PHYS 213 & 213L and PHYS 214 & 214L in their freshman year. These two courses and their labs are taught specifically to physics and EP majors. However, either part of that sequence may be replaced by the PHYS 215 & 215L and/or PHYS 216 & 216L service courses for general-engineering majors, since both course and lab sequences use the same calculus-based textbook.

Viewing a Wider World

NMSU requires two 3-credit *Viewing-the-Wider-World* courses. One of those courses can be substituted as outlined in a section found in the catalog entitled *Alternatives for Meeting Viewing a Wider World Requirements*, which states: “Students taking nine or more credits in a specific subject area, even though the courses are not designated as Viewing a Wider World courses, will have met the VWW requirements for that subject area. The 9 credit hours must be in 300- to 400-level courses in one prefix area.” The catalog further states: “One of the courses (3 credits) can be replaced by study abroad experience, consisting of at least four weeks of a Study Abroad program or university coursework in a foreign country earning 3 credits.”

Prospective graduates

EP students who plan to complete graduation requirements at the close of a semester or summer session will typically make an appointment with their academic advisor for a record check. The advisor will check whether all graduation requirements are fulfilled and whether there is a need for substitutions, exceptions, and/or waivers.

Diagram 1.3. Math and English Placement of Incoming Freshman

English and Mathematics Placement

Updated June 2016

English Placement

SAT (new) Writing & Language	SAT (old) Verbal	ACT English	English Course
10-19	Below 310	1-12	CCDE 110N/COLL 108 (linked)
20-22	310-399	13-15	CCDE 110N or Integrated CCDE 110N/ENGL 111G
23-31	400-549	16-24	ENGL 111G
32 and above	550-800	25-36	ENGL 111H

Mathematics Placement

		High School GPA								
ACTM	SAT (new)	SAT (old)	[0, 2.5)	[2.5, 2.75)	[2.75, 3)	[3, 3.25)	[3.25, 3.5)	[3.5, 3.75)	[3.75, 4)	≥ 4
<14	<450	<410	CCDM 103N			0			1	
14-15	450-470	410-430	0	0	1	1	1	1	1	1
16-17	480-500	440-460	1	1	1	1	2	2	2	2
18-19	510-520	470-490	2	2	2	2	2	2	3	3
20-21	530-550	500-520	2	2	3	3	3	3	3	3
22-23	560-570	530-550	3	3	3	3	3	3	4	4
24	580-600	560-580	3	3	4	4	4	4	4	4
25	610	590	4	4	4	4	4	4	4	4
26-36	620	600	4	4	5					

*SAT: Use new Math score if SAT taken after May 2016. Use old Math score if SAT taken before May 2016.

0	CCDM 103N
1	A S 103, CCDM 114N
2	Math 120, Math 210G
3	Math 111, Math 121G, Stat 251G, Stat 271G
4	Math 190G, Math 142G
5	Math 191G, 235

Number	MPL	Course Titles
CCDM 103N	0	Pre-Algebra
A S 103	1	Quantitative Foundations
CCDM 114N	1	Algebra Skills
Math 111	3	Fund of Elementary Math I
Math 120	2	Intermediate Algebra
Math 121G	3	College Algebra
Math 142G	4	Calc for the Biol & Mngt.
Math 190G	4	Trig. & Pre-Calculus
Math 191G	5	Calculus I
Math 210G	2	Mathematics Appreciation
Math 235	5	Calculus for Tech Student I
Stat 251G	3	Stats for Busi/Behv Sciences
Stat 271G	3	Stats for Psych Sciences

Math Placement Based on MPE

MPL	MPE Score	PL 1 Score
0	0-3,-,-,-	PL 1 Score
1	4-5,-,-,-	PL 1 Score
2*	6,-,-,-	*Note: ACT ≥ 16 required
3*	a,b,-,-	
	a+b ≥ 12	
4*	a,b,c,-	
	a+b+c ≥ 19	
5*	6,6,6,6	

Math Placement Based on AP Calculus Exams

Exam:	Calc AB	Score 3+	Credit for:	121G&191	6 credits total
	Calc BC	Score 3+	Credit for:	191&192	6 credits total

Closed classes

Students can petition with the instructor to be enrolled in a closed section of a course. The *Course Instructor* or the *Head of the Department* offering that course or the *Academic Dean of the College* can electronically overwrite the closed section for individual students, if permission is granted.

Technical Electives

Until the 2015 catalog, all EP concentrations required one or more technical elective(s). However, partly because of the introduction of ENGR100 and partly because of curriculum changes in the associated engineering disciplines, currently no technical electives are required for the *EP Aerospace Concentration*, and all other concentrations require just one technical elective. An acceptable technical elective for EP students is a) either a physics course with significant engineering content or b) an engineering course, numbered over 300 or above. A list of approved technical electives for EP is provided in *Criterion 5 – Curriculum*. In general, technical electives are supposed to advance the student's competence level in their respective EP concentration, and the students should discuss their elective choice with their advisor. Courses numbered 300 or above from other (non-physics) science departments may be approved for use as a technical elective, if the engineering content of the class is deemed sufficient by the *EP Program Committee*.

Career Guidance

Career advising of EP students continues throughout their academic programs. With strong participation from the two student societies, SPS and SEPh, the *Department of Physics* organizes and is involved in many activities geared toward career guidance and preparation, such as:

- undergraduate research opportunities at NMSU,
- finding summer internships in academia, national labs and/or industry,
- on-campus visits and colloquia from representatives of industry, national labs or professional societies,
- Physics GRE preparation workshops,
- CV (resume) workshops

These and similar activities allow that students learn about career opportunities and how to 'sell themselves to potential employers of EP graduates. Furthermore, NMSU regularly holds on-campus *Career Fairs* with participation of companies and other entities that tend to recruit EP graduates.

E. Work in Lieu of Courses

Summarize the requirements and process for awarding credit for work in lieu of courses. This could include such things as life experience, Advanced Placement, dual enrollment, test out, military experience, etc.

Dual Credit for High School Students

The *Dual Credit Program* is designed to give high school students an opportunity to enroll at NMSU prior to high school graduation. Students must be either a junior or senior in high school and enrolled in one-half or more of the minimum course requirements approved by the following:

- *Public Education Department* in a *New Mexico Public School District*;
- Locally chartered and state-chartered charter school;
- State-supported school;
- Be in physical attendance at a bureau of Indian education-funded high school at least three documented contact hours per day.

Under *Senate Bill 158* signed by the *Governor* and effective July 1, 2014, support for dual credit privileges at post-secondary institutions is now available for private and home school-eligible

students. Under a *Statewide Dual Credit Master Agreement* between NMSU and the school district, students enrolled in approved dual credit courses are eligible to have the full cost of tuition and general fees waived.

Dual credit students must complete:

- the Undergraduate Admission Application;
- provide official high school transcript and official ACT or SAT scores to the Undergraduate Admissions Office;
- complete the *State of New Mexico Dual Credit Request Form*.

Requirements to be admitted to the dual credit or early admission programs are:

- high school grade point average (GPA) of 3.0;
- an ACT composite of 23 or equivalent SAT score;
- substantial progress toward completion of the following high school courses: 4 units of english, 4 units of math (Algebra 1, Geometry, Algebra 2, and one additional math course), 2 units of science (beyond general science), 1 unit of foreign language or a unit of fine arts.

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 regardless of how 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. The current *NMSU CLEP Policy* as well as test schedule information is available through *Testing Services* DACC East Mesa, RM 210. *Testing Services* may be reached at: (575) 528-7294.

Credit by Examination

Any student enrolled with a cumulative GPA of at least 2.0 who is 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: independent study, research or reading courses, 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/she is already registered, he/she may be permitted to challenge the course. A student desiring to apply for special examination may obtain the necessary forms from the *Office of the Registrar*. The fee for challenging a course is the same as the approved tuition rate. 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 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 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, National Guard members and reservists, who are current students or students applying for admission to NMSU, may be granted academic credit on a case-by-case basis upon evaluation of military transcripts - the *Joint Service Transcript* and the *Community College of the Air Force* transcripts. Course equivalencies and credit hours awarded for a NMSU degree are determined by colleges and/or academic departments. Credit hours may be awarded for specific courses toward degree requirements, or as elective credit. The number of credit hours awarded will be determined by the college and/or academic department.

NOTE: Students submitting military transcripts for credit evaluation must keep in mind the Maximum Time Frame Policy.

F. Graduation Requirements

Summarize the graduation requirements for the program and the process for ensuring and documenting that each graduate completes all graduation requirements for the program. State the name of the degree awarded (Master of Science in Safety Sciences, Bachelor of Technology, Bachelor of Science in Computer Science, Bachelor of Science in Electrical Engineering, etc.)

F.1. University (From NMSU 2017-2018 Catalog):

Applying for a Degree

Any students that are in their final semester of classes are considered degree candidates and are required to submit an '*Application for Degree*' as well as pay graduation fees for each degree being sought. The *Application for Degree* form is available online through the MyNMSU website. It must be completed and submitted by the designated deadline for that semester. The fees for the Las Cruces campus are all listed in the *Tuition, Fees and other Expenses* section of the catalog. Once a student submits the application, the fee will be included in the total cost for the semester or session in which the candidate anticipates completing their degree requirements.

If degree requirements are not completed during the semester session the student originally applied for, the student must reapply and pay the appropriate fees. A \$25 late fee applies to applications received after the application deadline.

A student must specify which catalog they are using for their degree requirements for the university to determine if the requirements are met and if a degree can be certified. The latest date for

substitution or waiver of required courses for degree candidates is two weeks after the last date of registration for regular or summer terms.

F.2. College (From NMSU 2017-2018 Catalog):

In addition to the university requirements and procedures above, at the beginning of the semester before graduation, the *Associate Dean of Academics* office creates a spreadsheet for all degree applicants listing outstanding deficiencies. The office works with each department to process necessary exceptions. Departments then notify students missing any requirements so they may register in time for classes. Students have a final chance to make up requirements in the semester they wish to graduate by taking mini-semester or 6-week courses.

G. Transcripts of Recent Graduates

*The program will provide transcripts from some of the most recent graduates to the visiting team along with any needed explanation of how the transcripts are to be interpreted. **These transcripts will be requested separately by the Team Chair.** State how the program and any program options are designated on the transcript. (See 2017-2018 APPM, Section I.E.3.a.)*

Transcripts will be provided at the time when requested.