# THE GRADUATE SCHOOL

New Mexico State University (NMSU) has a long history of providing formal graduate study. The first master's degree from NMSU was awarded in 1896. In 1921, the NMSU president appointed a committee to oversee graduate study. The Graduate School was formally established in 1956 with a full-time dean, and in the same year, 57 master's degrees were awarded.

The Graduate School mission is to provide affordable access to highquality educational experiences, new modes of graduate education, and works with dedicated faculty to help students from diverse cultural and economic backgrounds reach graduate school success. Our vision is to empower students to succeed and excel while pursuing a meaningful education. In doing so, we cultivate the collaboration of academic, professional and personal skills while helping students graduate in a timely manner.

# **Diversity and inclusion statement**

The Graduate School promotes a high-quality learning environment that embraces diversity and inclusion of every background, race, ethnicity, and life experience. NMSU believes that a diverse student body is essential for learning, and NMSU is proud to be one of the few high-research universities that reflects Hispanic, Native American, other American cultures, as well as cultures from around the world. Our rich and diverse community includes international students from Africa, Asia, Central/South American, and Europe. The goal of NMSU and the Graduate School is to be fully inclusive in all forms of diversity, and to provide an environment where all are welcomed and empowered to be themselves and thrive.

### **Policies**

Since graduate degrees are awarded for attainment in scholarship, the requirements stated in this catalog are to be considered as minimal. The major department or the dean of the graduate school may make additional requirements as deemed necessary for each candidate. Responsibility for securing approval of the proposed program of study rest with the student and is subject to the approval of the respective department head or program director. Frequent consultation with the advisor is essential to satisfactory progress toward degree completion.

# **Graduate Degree Programs**

For a full listing of the Graduate Programs offered at New Mexico State University; please see the Graduate Admissions webpage https://apply.nmsu.edu/ (https://apply.nmsu.edu/apply/?id=1c3c41ea-b5f9-48ef-83c3-b085794ba277)

### **Admission for Graduate Students**

A student seeking admission to graduate school at NMSU must hold a minimum of a bachelor's degree or an advanced degree from a regionally accredited institution. The academic program of the completed degree should be equivalent to a comparable NMSU degree's requirements.

#### **Application materials:**

- · Students must submit a complete Application for Admission.
- Other supplemental documents required by the academic department, may include but are not limited to, unofficial college transcripts, test scores (i.e., TOEFL, IELTS, Duolingo, GRE,

- GMAT), statement of purpose, writing samples, and letters of recommendation.
- Student must send official transcripts from their prior colleges or universities directly to the Graduate School.

Formal application is required of all prospective students, including graduates of NMSU, who seek admission to a graduate program. If a student is recommended for admission by the academic department, the student must submit all required application materials directly to the Graduate School.

No student is officially admitted into a graduate program until a Certificate of Admission has been issued by the Graduate School. The Graduate School considers the Certificate of Admissions valid for a one-year period. Some academic departments may require re-application if the applicant does not enroll in the semester noted in the certificate

#### **Categories of Graduate Students**

A student seeking admission to a graduate program is assigned one of the following categories based upon previous academic performance. Click here (https://catalogs.nmsu.edu/nmsu/regulations-policies/#academicprogramsofstudytext) for complete regulatory information within the different programs of study:

#### **Doctoral Regular**

To be considered for admission to a doctoral program, an applicant must have a minimum grade-point average of 3.0. Some doctoral degree programs also require a master's degree or its equivalent. NMSU does not admit a doctoral student on a provisional basis.

#### Master's Regular

An applicant whose scholastic record is satisfactory will be admitted as a regular student. This classification includes:

- An applicant whose grade-point average is greater than or equal to 3.0, or a grade-point average greater than or equal to 3.0 in the last half of undergraduate work,
- An international applicant whose grade-point average (or its equivalent) is greater than or equal to 3.0., from a four-year bachelor's degree or its equivalent.
- A continuing graduate student whose grade-point average is greater than or equal to 3.0.
- A student with prior graduate work at another institution whose minimum grade-point average is 3.0.

#### **Master's Provisional**

An applicant whose scholastic record does not meet the Master's Regular standards can be admitted provisionally. Students admitted as a Master's Provisional include:

- 1. A transferring graduate student whose cumulative grade-point average is less than a 3.0.
- 2. Students whose grade-point average the last half of undergraduate work is less than a 3.0 but has a minimum grade-point average of 2.5.

A student admitted provisionally must complete their first three courses, a total of 9 credits of graduate work, with a minimum grade-point average of a 3.0. A provisional student who does not meet the 3.0 grade-point average after 9 graduate credits hours is subject to dismissal.

A student admitted on a provisional basis is prohibited from working as a teaching assistant. However, they may work as a research assistant or a

grader for one semester. To hire a provisional student, departments must submit an official letter to the Graduate School requesting permission.

#### Master's Undeclared

An applicant that has not decided on a specific graduate degree program and has an undergraduate minimum grade-point average of 2.5 may be considered for admission as an undeclared master student. International students with an F-1 visa are not eligible for undeclared master status.

#### **Undeclared Student Enrollment Restrictions**

- Undeclared students are restricted to enrolling in a maximum of 9
  graduate credit hours. To continue enrollment the student must apply
  and be admitted into a degree-seeking program.
- Course restrictions placed by the graduate department may constrain enrollment by an undeclared student.
- An undeclared master's student is restricted to transferring 9 graduate credit hours to a degree program.
- Undeclared students are not eligible to receive a graduate assistantship.
- Only undeclared regular status students who meet all Title IV eligibility requirements are eligible to receive federal financial aid for one consecutive 12-month period beginning the first term of enrollment. Questions about financial aid and undeclared master's should contact Financial Aid and Scholarship Services.

#### Transfers from Undeclared to a Degree Program

Students transferring from an undeclared master's to a degree program require a new Application for Admission.

- If the student has 9 completed graduate credit hours, the cumulative minimum grade-point average must be 3.0 for the request to be considered.
- If the student transferring to a degree program has fewer than 9 completed graduate credit hours their admission is based on their undergraduate GPA (between 2.5 to 2.9 is Master's provisional; 3.0 or greater is Master's regular).

# **Graduate Certificate Program Students**

Graduate certificate programs are designed to develop specific skill training and enhance a student's expertise to meet employment needs locally, regionally, nationally, and globally. A graduate certificate is a focused collection of courses, consisting of 12-18 credits, in a given discipline or a set of related disciplines.

A graduate certificate is not an official graduate degree of NMSU. A student that successfully completes a certificate program at the graduate level will receive a certificate of completion statement on their official transcript and a formal certificate from the Graduate School. A student has three years to complete a graduate certificate program.

The graduate certificate program is offered to both currently enrolled, degree-seeking students and students who enroll solely to obtain a certificate. Students currently enrolled in degree programs must apply separately to the graduate certificate program. Students wishing to enroll only in a graduate certificate program must meet all admissions criteria. Successful completion of a certificate program does not guarantee admission into a graduate degree program. A student enrolled in a certificate program must apply and be accepted into a graduate degree program.

A student enrolled in a graduate certificate program cannot transfer credits from another institution towards the completion of the certificate. However, transfer credits taken in a graduate certificate program may be applied towards an NMSU graduate degree program in the same focus area. The number of transfer credits will be determined by the program (program of study or degree audit). The time limit on transfer credits is 5 years after the completion of the certificate.

Students enrolled in a graduate certificate program *only* are not eligible for a graduate assistantship.

# Master's Accelerated Program (MAP)

Master's accelerated programs (MAP) provide the opportunity for academically qualified undergraduate students to begin working on a master's degree during their junior and senior years of undergraduate study. A graduate program has the discretion to use up to 12 credits of NMSU coursework (450 level or higher) towards the completion of a master's degree. To be eligible for MAP, students must have a minimum GPA of 2.75 (Departments can require a higher GPA). MAP students must complete 60 credit hours of undergraduate work of which 25 credit hours must be completed at NMSU. To receive graduate credit for the 12 credit hours, students must receive a grade of B or higher. You can find more details about the MAP Policy and MAP form here (https://gradschool.nmsu.edu/Current%20Students/Graduate %20Forms.html#MAP1).

# **Application Dates and Deadlines**

Contact the graduate degree program for published application deadlines. If the graduate program does not publish a deadline, the Graduate School encourages the applicant to apply by March 15th for fall enrollment and by October 15th for spring enrollment to be considered for financial support. The Graduate School will continue to accept applications 30 days before the first day of classes. No application materials will be returned to the applicant.

# **Transcripts**

An applicant is required to have one official transcript from each institution attended sent directly to the Graduate School.

If the applicant's undergraduate coursework is not complete at the time of application, they must submit an official transcript showing the completion this course work directly after the degree has been granted.

### **Standardized Tests**

Certain graduate programs may require standardized test scores for admission. An applicant may be required to take one or more of the following examinations as determined by the academic department: Graduate Record Examination, the Miller Analogies Test, the Graduate Management Admission Test.

See academic department program description for required testing.

### Readmission

An NMSU student who has been out of school for more than two consecutive terms is required to submit a formal application for readmission to NMSU. The application will be reviewed by the Graduate School and academic department. The application should be submitted at least 30 days before the start of the semester.

A student who has attended other institutions during their absence is required to submit official transcripts to the Graduate School before the date of registration and be eligible to return to the college or university last attended. Student's readmission status and academic standing will be determined by previous NMSU academic standing, taking into consideration their academic performance at other institutions during the applicant's absence from NMSU.

# **Renewal of Application for Admission**

The admission credentials for an applicant who does not register for the semester admitted are retained at the Graduate School for a period of one calendar year from the date of application. At the end of this period, credentials are discarded. A student wishing to renew their application after the one-year lapse must submit a new application.

### **Denied Admission**

The Graduate School or the department may deny admission if the scholastic record or prior program of study is judged inadequate. If denied admission by a specific academic department, the applicant may be eligible to seek undeclared status as described in Categories of Graduate Students. If denied by the department, the student may wish to contact the department for additional information.

Admission may be denied to an otherwise qualified applicant when the desired program lacks resources to accommodate additional enrollment.

A student who is denied admission to one program and wishes to be considered for another program must complete a new application for the second program.

Application documents are retained by the Graduate School for one calendar year.

# **Non-Degree Admission**

Non-degree admission is designed to meet the needs of an applicant who does not wish to pursue a degree or who has not yet completed the application process to a specific department. No more than 9 graduate credits earned in non-degree status may be transferred to a graduate degree program. Academic advising for non-degree students is obtained from the academic department. NMSU only recognizes graduate credit transfers for non-degree work from the University of New Mexico (UNM). Transfer credit is restricted to 6 credits with the approval of the appropriate department, the college dean, and the graduate dean.

A student classified as non-degree is not eligible to receive financial aid, student employment, or institutional tuition waivers; to participate in student government or intercollegiate athletics; and to receive benefits from veterans' programs.

# **Visiting Student**

A visiting student is a student taking graduate credit to transfer to his or her home institution. An Application for Admission to the Graduate School must be submitted 30 days before registration. The student is required to submit unofficial transcripts. The academic department admits a visiting student. Visiting students are not eligible for undeclared status or for graduate assistantships.

# Out-of-State Students and Legal Jurisdiction

By applying for admission/enrollment, both the student and parents agree that New Mexico law prevails and all litigation will be held in New Mexico federal court or state court in Dona Ana County, New Mexico.

## **Contact Information**

For more information, contact:

Graduate School, MSC 3-GS New Mexico State University PO Box 30001

Las Cruces, NM 88003-8001 Phone: (575) 646-5746

http://gradschool.nmsu.edu/ (http://gradschool.nmsu.edu)

### **International Graduate Students**

A graduate international student must hold at minimum a fouryear bachelor's degree or its equivalent and is able to demonstrate English proficiency, both written and oral by submitting an official TOEFL or IELTS score report.

#### **English Proficiency for Admission**

Doctoral students must provide official proof of an English Proficiency minimum score as follows:

- TOEFL 79 IBT; 550 PBT
- IELTS 6.5
- · Duolingo 105

International students can be admitted into a master's degree program with lower English Proficiency scores, as follows:

- TOEFL 68 to 78 IBT: 549 PBT
- IELTS 6.0
- Duolingo 95 to 104

Students with scores in this range are required to sit for the English Placement Exam prior to beginning academic coursework. (The International Student and Scholar Services Office will arrange this test upon arrival). If the results of the English Placement Exam do not meet the requirements for academic coursework, the student may be required to take additional academic English classes as part of the degree requirements (ENGL 1105M (https://catalogs.nmsu.edu/search/? P=ENGL%201105M) Intermediate ESL Composition and Grammar Review and/or ENGL 471 M (https://catalogs.nmsu.edu/search/?P=ENGL%20471%20M) Scholarly Writing for International Graduate Students).

The university reserves the right to require any prospective international student to meet the TOEFL or IELTS requirement.

#### **Enrollment**

All international graduate students on F-1 or J-1 visas are required to comply with Department of Homeland Security regulations governing maintenance of status related to full-time enrollment and making normal progress toward completing a degree. Therefore, all international graduate students are required to enroll in 9 or more credits (exclusive of audited work) during fall and spring semesters.

# Transfer of Graduate Credits into a Degree Program

Graduate credits taken at NMSU as undergraduate electives may be transferred to the student's graduate program at NMSU. Graduate credits from another university may be transferred to NMSU, provided the credits were earned on the campus of an accredited institution. Transferred course work (credit and hours) is maintained separately from NMSU course work. Transfer credits must meet the same time-limit requirements (seven years) as master's level graduate classes at NMSU.

Immediately after initial enrollment in a graduate programs, students must submit a Transfer of Credit request form (https:// eltnmsu.sharepoint.com/sites/GraduateSchool/Forms/Forms/ AllItems.aspx?id=%2Fsites%2FGraduateSchool%2FForms%2FGeneral %20Graduate%20Forms%2FGeneral%20Graduate%20Forms%2Ftransfer %5Fof%5Fcredit%5Fform1%2Epdf&parent=%2Fsites%2FGraduateSchool %2FForms%2FGeneral%20Graduate%20Forms%2FGeneral%20Graduate %20Forms) to obtain formal permission from their advisor, department head, and the Graduate School dean to transfer graduate-level course work. The department has the responsibility to accept or reject transferred credits depending on various conditions, such as the course credit fits logically into an NMSU degree program, accreditation requirements, level of course work, grades, and other conditions deemed relevant by the department. The department may also require work to be validated by examination or until the work done at another institution is proven by satisfactory work in residence.

#### Special conditions:

- Master's degree To meet residency requirements, students must take at least 50 percent of their required coursework at NMSU.
- Master of Fine Arts Before consideration for candidacy, the department head and the graduate advisor will determine the number of transferable credits from a previous graduate program.
- Specialist in Education Degree A maximum of 6 graduate credits earned at another approved institution may apply to the Specialist in Education degree. Transfer credits must have been earned during the five-year period prior to completion of the specialist in education degree.
- Graduate Certificates Students enrolled in certificate programs may not transfer credits from another institution towards the completion of the certificate program offered by NMSU.
- Doctoral degree students may transfer course work that the departments deem as logically fits into the program of study.

# **Graduate Certificates**

Students enrolled in certificate programs may not transfer credits from another institution towards the completion of the certificate program offered by NMSU. However, they can transfer credits taken in a graduate certificate program at NMSU into a graduate degree program at NMSU, provided that the courses will lead towards a graduate degree in the focused area of the certificate program. The number of transfer credits will be determined by the program of study. The time limit on course transfer is five years after the completion of the certificate.

# Master's Level

In order to meet residency requirements at the master's degree level, students must take at least 50 percent of their required coursework at NMSU.

# **Masters of Fine Arts**

Before consideration for candidacy, the department head and the graduate advisor will determine the number of transferable credits from a previous graduate program.

# **Specialist in Education Degree**

A maximum of 6 graduate credits earned at another approved institution may apply to the Specialist in Education degree. Transfer credits must have been earned during the five-year period prior to completion of the specialist in education degree.

### **Doctorate Level**

At the doctoral level, students may transfer course work that logically fits into the program of study.

# Funding Opportunities for Graduate Students

The Graduate School offers awards, assistantships, and fellowships to qualified graduate students. All awards require faculty nominations. Continuing and newly admitted students can request either a faculty member or the department head to nominate them for the Graduate School awards. The student must be admitted to the Graduate School before a request for an assistantship or fellowship will be considered by the department or the Graduate School.

In selecting individuals for any assistantship or fellowship and in the administration of appointments, New Mexico State University does not discriminate on grounds of age, ancestry, color, disability, gender identity, genetic information, national origin, race, religion, retaliation, serious medical condition, sex (including pregnancy), sexual orientation, spousal affiliation, or veteran status. The University limits the number of years a student may be supported on funds from the state of New Mexico. Departments may place additional limitations on the years of support. For detailed information, application process and deadlines please consult https://gradschool.nmsu.edu/future-students/How To Apply

A student should check **Graduate Assistant Employment Guidelines of the Graduate School**.

#### **Assistantships**

Graduate assistantships, including teaching and research, offered by New Mexico State University are awarded primarily by the students' academic department. Employment guidelines may be found at: https://gradschool.nmsu.edu/ga-and-union/grad-assistant-forms/Guidelines\_on\_Employment\_of\_Graduate\_Assistants%20Jan%202023.pdf

Students with assistantships must maintain full-time status by enrolling in and successfully completing 9 credit hours each semester. Students must also maintain a 3.0 grade-point-average. Courses taken for audit do not count in the minimum graduate assistant course load requirement. Graduate assistants should take no more than 15 course credits per semester. During their first semester at NMSU, if course deficiencies are identified, the student can register for 3 undergraduate credits and a minimum of 6 graded graduate credits to be eligible for a graduate assistantship. The graduate assistantship duties typically require students to work 20 hours per week (full-time, fall and spring).

#### **Teaching Assistantships**

A student seeking appointment as a teaching assistant will be required to demonstrate proficiency in communication skills necessary for satisfactory service in the classroom. All graduate students awarded an assistantship must complete the online mandatory orientation offered by the Graduate School. Departments may require students to complete workshops or orientations to qualify for assistantships.

Eligibility for teaching assistantships includes:

- Acceptance by and subsequent registration in the Graduate School and academic department
- · Classification as a "regular" graduate student
- All international students seeking a teaching assistantship must demonstrate proficiency in English and competency in Pedagogy.

#### **Teaching Assistantships for International Students**

All international students seeking a teaching assistantship must demonstrate proficiency in English and competency in pedagogy. Prior to their first semester as a teaching assistantship, international students must undergo the NMSU International Teaching Assistant screening (ITAS) administered by the NMSU English Department on behalf of the Graduate School. International graduate students wishing to hold a teaching assistantship should check with their department to determine when they should arrive on campus to meet the screening requirement. The ITAS can be waived for international students who hold a degree from an accredited university in the United States, or a country where English is the official language of instruction. Departments also have the discretion to allow waivers for special circumstances.

The ITAS requires that a teaching assistant candidate deliver a short, tenminute teaching demonstration of an introductory undergraduate level course in a topic relevant to their area of studies. The demonstration is observed by English Department faculty and an actual undergraduate student. Based on the results of the screening, the English Department observers present a report of findings to the department head where the graduate student will be a teaching assistant. Students who pass the screening exam are immediately eligible for assignment to a teaching assistantship.

Students who do not pass the screening exam must enroll in and satisfactorily complete **COMM 485**, "International Teaching Assistant Development" course before being eligible for a teaching assistantship. International students who don't pass the screening exam may be eligible to serve as graders for their academic departments. The academic departments must receive approval from the Graduate School to hire these students.

#### **Assistantships for Provisional Graduate Students**

Graduate students accepted on a provisional basis cannot serve as teaching assistants. However, they can serve as research assistants. Eligibility includes:

- Acceptance by and subsequent registration in the Graduate School and academic department
- Classification as a "provisional" graduate student
- Enrolling in and successfully complete 9 graded credits with a minimum of 3.0 GPA.
- Funded on research projects of the faculty of NMSU

Provisional students can also be hired as graders for one semester. The department must hire the student as a Graduate other at the time of

completing the hiring path, so that the student be allowed to work as a grader.

#### **Diversity Graduate Assistantships**

The diversity awards are awarded thru the nominations process and allocated to departments on a competitive basis to help increase the diversity and quality of the student body. Departments will commit matching funds to support these awards for the student. The diversity award can be used to recruit domestic students. Please note that the award is for an academic year. Departments will need to commit funds to the selected student for at least one additional semester or preferably a year. The selected student must be admitted to the department prior to being nominated for the diversity award.

#### **Fellowships**

The Graduate School maintains a Fellowship and Grant Information webpage (https://gradschool.nmsu.edu/Funding%20and%20Financial%20Aid%20.html) providing a database of grants, fellowships and assistantships for graduate students. The university offers a number of fellowships available to both new and continuing students.

#### **Graduate Assistant Tuition Fellowships**

As an opportunity for departments to recruit and nominate outstanding graduate students to their programs, the Graduate School awards tuition fellowships to graduate assistants. Master's degree students will receive up to two years of support and doctoral degree students will receive up to three years of support. In order for students to qualify for a second and third year of support, they must maintain their status as graduate assistants for the duration of the tuition fellowship period. These awards are for students receiving 10 hour or 20 hour graduate assistantships. Students must be enrolled in and successfully complete 9 graded credits with a minimum of 3.0 GPA. The tuition fellowships are paid for fall or spring semesters only and do not include fees.

#### **McNair Graduate Assistantships**

The Graduate School wishes to support and recognize the success of the McNair program by offering several McNair Graduate Assistantships for one academic year with a match of one year from a department. Students must be nominated by the department for this award.

# Merit-Based Enhancement Fellowships for Current Graduate Assistants

To help departments reward outstanding graduate assistants, the Graduate School offers Merit-Based Enhancement Fellowships to graduate assistants who are engaged in the teaching or research mission of New Mexico State University. The amount of the award is \$4,000 for an academic year. Nominations must come from faculty.

#### **Outstanding Graduate Assistantship Award**

We also offer Outstanding Graduate Assistant awards of \$6,250 to recognize the contributions of eight (8) graduate assistants to the teaching and research mission of New Mexico State University. The awards allow faculty to show appreciation for the excellent work of graduate assistants. Current graduate assistants must be nominated by their faculty to be considered for the awards.

# State of New Mexico Department of Higher Education (NMHED) Graduate Scholarship Programs

The purpose of the NMHED fellowships/assistantships is to "increase graduate enrollment in the state's public universities of students from groups underrepresented in graduate education" (Title 5 Post-Secondary

Education, 5.7.15 NM Administrative Code). Underrepresented groups include women, minorities, the visually handicapped, the physically disabled and other groups that have are underrepresented in their field of study. Applicants must be U.S. citizens or permanent U.S. residents. Priority is given to <a href="New Mexico students">New Mexico students</a> from those groups with the most severe under-representation and students with the greatest financial need" (5.7.15.NMAC).

NMHED fellowships carry stipends of \$7,200 per annum and matched with half-time (10 hours per week) teaching assistantship provided by the student's department for a total award of \$15,800.

#### **Eligibility:**

- Fellowships are available for two years for master's students and four years for doctoral students.
- One of the NMHED fellowships is, when possible, designated for a McNair Scholar.
- Departments are required to: a) use their graduate assistantship budget to bring the amount of the award up to the current salary of a graduate assistant that is working 20 hours per week, and b) provide a 20-hour graduate assistantship to the student while they receive the NM Higher Education Department award.
- Eligible according to a standard needs analysis or financial aid officer's professional judgement.

For the student to establish financial need, students must complete a Free Application for Federal Student Aid (FAFSA) form available online in the Financial Aid Office. This form is not to be returned to the Graduate School. The results will be sent to the student and the Financial Aid Office. Students must have a complete file and have been approved for financial aid to be considered for this fellowship. Preference will be given to those students that have a current FAFSA form on file at the NMSU Financial Aid office.

Click here (https://gradschool.nmsu.edu/Current%20Students/Graduate %20Forms.html) for the nomination process details.

# Graduate Assistants Salaries and Tax Withholding Guidelines

Internal Revenue Service tax withholding guidelines require graduate students employed through NMSU to maintain at least 6 credits of course work during the fall and spring semesters and 3 credits of course work for summer sessions to be eligible for the student FICA tax exemption. Student employees who do not meet this requirement during any given pay period will be subject to Social Security taxes and Medicare taxes. Salaries for the three salary levels of graduate can be found here. (https://hr.nmsu.edu/general-resources/toolkits1/grad-assistant.html)

**Level I (G1)** - Applies to regularly enrolled students pursuing a master's degree. This level is also for a first year student seeking a doctoral degree who does not currently hold a master's degree. Once the doctoral student becomes a second year student and passes their qualifying exam, they can obtain support as a Level II (G2) student.

**Level II (G2)** - Applies to students pursuing the Education Specialist or Doctoral degree who have passed the qualifying exam or who have a master's degree in the same or cognate field and the recommendation of the head of their major department.

**Level III (G3)** - Applies to a doctoral student who has passed the comprehensive examination and has advanced to candidacy.

Graduate assistants employed at least ten hours per week will be given in-state tuition during the first 12 months of tenure if the Graduate School approves of the hiring process prior to census date (stated by the University Student Records Office as the third Friday of the semester each spring and fall semester).

If New Mexico resident status has not been established by the time of any reappointment, the graduate assistant may be subject to non-resident tuition rates.

Applications for state residency may be obtained in the University Student Records Office located in the Educational Services building.

#### **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.

In order to be employed by New Mexico State University all students must have obtained a social security number within eight weeks of being hired or risk losing their assistantship.

When an official social security number is issued to an international student, it is the student's responsibility to inform Human Resources or the University Student Records Office as soon as possible.

#### **Hourly Work**

Eligibility for student payroll requires that a graduate student

- 1. be admitted to the Graduate School as well as to a department,
- 2. maintain a minimum cumulative GPA of 3.0, and
- 3. be enrolled for at least 9 graded credits.

A student may not work more than 20 hours per week during the academic year. Students looking for current job postings should check with Career Services, Garcia Annex, Room 204; or visit http://careerservices.nmsu.edu/ (http://careerservices.nmsu.edu).

Students not classified as residents of New Mexico but working at an hourly rate are not eligible to receive in-state tuition.

#### **Contact Information**

For more information, contact:

Graduate School, MSC 3-GS New Mexico State University PO Box 30001

Las Cruces, NM 88003-8001 Phone: (575) 646-5746

http://gradschool.nmsu.edu/ (http://gradschool.nmsu.edu)

# **Postdoctoral Fellowships**

Those individuals who are exemplary scholars, who have recently been awarded a doctoral degree, but who wish to continue their education and research experience under the direction of a professor at New Mexico State University are classified as postdoctoral. The postdoctoral fellowship is a regular professional appointment normally for one or two years. Under no circumstances will an individual remain in this classification for more than three years.

Postdoctoral fellowships are advertised and applications are submitted to the hiring department in compliance with the guidelines for hiring professional staff, but without the requirement for a position description questionnaire. An "E-Hire" staffing authorization request must be submitted to the office of Human Resources by the hiring department. No offer of employment may be made until approval has been given by Human Resources. Persons classified as postdoctoral fellows pay Social Security and New Mexico State Educational Retirement.

A postdoctoral fellow has the following privileges:

- may take 6 credits in spring and fall semesters, 4 credits per summer session without tuition
- · is eligible to purchase an employee parking permit
- is eligible for other employee benefits available to regular employees, including annual and sick leave, as well as health, dental, and life insurances
- may purchase athletic tickets, activity tickets, and gymnasium privileges
- is eligible for library privileges

The University recognizes and supports the concept of off-campus study and research as a valuable experience for graduate students. These experiences may take the form of internships, intensive study of specialized techniques with personnel at other institutions, and conducting research at specialized research facilities. Arrangements for such off-campus activities should be made with the student's committee and the graduate dean and should represent opportunities not normally available at this university. When the bulk of a student's research is to be conducted off-campus, both on- and off-campus advisors should be appointed and periodic meetings with the student's committee held to ensure timely progress. Such opportunities offer students considerable flexibility in their training and promote valuable contacts between the student, the university, industry, and research institutions. Students are encouraged to pursue these opportunities with their advisors and the graduate dean.

# **Agricultural Experiment Station**

The Agricultural Experiment Station is the research division of the College of Agricultural, Consumer and Environmental Sciences. Faculty, professional personnel, and graduate students conduct basic and applied research concerned with biological, physical, and economic phases of food and fiber production, processing, and distribution; consumer health and nutrition; and the social and economic aspects of rural living. Energy, environmental, and natural resource conservation aspects of these broad disciplines offer many opportunities for the graduate student to undertake meaningful research investigations in both the laboratory and the field.

There are eight departments on the main campus with excellent laboratory facilities for research. In addition, the station maintains 13 field research centers including eight agricultural science centers, a

forestry research center, a livestock research center, an animal insect lab, and two research ranches.

The station provides financial support to graduate research assistants and cooperates with research institutes at the university and with various state and federal agencies in providing opportunities for graduate research programs covering a wide scope of student interests. For further information, contact aesdean@nmsu.edu or visit http://aces.nmsu.edu/aes/.

# **Apache Point Observatory (APO-ARC)**

Apache Point Observatory (APO) is located in the mountains of south-central New Mexico and is operated by New Mexico State University. The observatory is a major astronomical research facility that is home to four telescopes. The largest is a fully equipped 3.5-meter telescope that can be used for optical and infrared imaging, photometry, and spectroscopy. Apache Point Observatory is also the site of the Sloan Digital Sky Survey 2.5-meter telescope, which is running several different wide-field surveys touching on many facets of astronomy. NMSU owns and operates a 1-meter telescope at APO for wide field imaging. There is also a 0.5-meter telescope at the site.

Apache Point Observatory is owned by the Astrophysical Research Consortium (ARC). The consortium members include: New Mexico State University, the University of Colorado, the University of Virginia, the University of Washington, Georgia State University and Johns Hopkins University. NMSU manages and operates the observatory for the ARC consortium. Astronomy faculty and graduate students use the facility for various research projects. For further information, e-mail astro@nmsu.edu.

### **Arts and Sciences Research Center**

The research center is the coordinating office for all scholarly activities within the College of Arts and Sciences. The primary functions are service to departments and faculty members, and the administration of grants and contracts. The center encourages and stimulates individual research and creative efforts in all areas of the college, and it facilitates the development of potential research programs within the college, and with other colleges, institutes, the Physical Science Laboratory, and external organizations. The center assists individual faculty members by providing small grants of "seed" money. Typically, support services fall within, but are not limited to, the following areas:

- · Location of funding sources
- · Administration of grants and contracts
- Financial management of grants and contracts
- · Liaison with the Office of the Vice President for Research

Contact: Lorenza Sanchez at lorenzas@nmsu.edu https://artsci.nmsu.edu/research/contact-research-center.html

### **Bioinformatics Research Lab**

The bioinformatics research lab develops efficient computational and statistical methods to model mechanisms of complex biological systems. The lab's work rigorously evaluates both the theoretical and practical effectiveness of computational methods for characterizing molecular interactions from high-throughput measurements such as next generation sequencing data. The lab's long term goal is to invent advanced computational technology to expedite quantitative understanding of the complexity of life processes.

Director: Joe Song

https://www.cs.nmsu.edu/~joemsong/group.shtml

# **Biology Research Facilities**

The Department of Biology houses multiple core facilities and individually faculty-maintained research laboratories that have been successful in the acquisition of millions of dollars in research grants from the NIH, NSF, and other agencies. The facilities and equipment include cell culture facilities, insect and invertebrate rearing and microbiology culturing facilities, next generation DNA sequencing instruments, widefield and confocal microscopes as well as a well-maintained herbarium and vertebrate museum holding more than 100,000 specimens from our region and beyond. Individual research laboratories are equipped to employ a diverse array of molecular, physiologic, behavioral and computational tools to address research questions related to: organismal and microbial evolutionary mechanisms and physiology; vaccine development; host-symbiont interactions; cell and developmental biology; neuronal and muscular tissues; animal vocalization and behavior; computational modeling of biological phenomena; and molecular systematics.

Contact: Dr. Charles Shuster (cshuster@nmsu.edu)

# **Bureau of Business Research and Services**

Founded in 1969, the bureau has two basic objectives. The first is to provide business and economic research services to both public and private sectors of the state, the region and the nation. Research capabilities in the behavioral and managerial sciences, business systems, economic and social sciences, marketing, statistical design and analysis and regional planning can be applied to problems relating to economic growth, business development and community needs in New Mexico.

The second objective of the bureau is to provide management training services to business organizations and associations, to government agencies, and to the public as well. Management development seminars, training programs, and analytical services are designed to meet specific organizational needs.

The Bureau of Business Research and Services is a member of the Association for University Business and Economic Research.

https://business.nmsu.edu/faculty-research/research-programs/centers/bbrs/bureau-of-business-research-and-service.html

# Carlsbad Environmental Monitoring and Research Center

Created in 1991 with a grant from the U.S. Department of Energy, the Carlsbad Environmental Monitoring & Research Center (CEMRC), a department of the College of Engineering, conducts environmental research, provides special analytical services, assists with technology development, and disseminates information for federal, state, and private sponsors. CEMRC is housed at Light Hall, a 26,000-square-foot facility located in Carlsbad, in southeast New Mexico. The facility's laboratories include radiochemistry and associated nuclear spectroscopy, environmental organic and inorganic chemistry, in vivo bioassay, and field sampling. A primary activity of CEMRC is long-term environmental monitoring for contaminants in the region of the Waste Isolation Pilot Plant (WIPP), located near Carlsbad. The data produced from this project are summarized in periodic reports and are presented on the CEMRC web

site at www.cemrc.org. Primary research areas of the CEMRC include studies of atmospheric dust and inorganic contaminants, human and ecological risk assessment, and development of radioanalytical and spectroscopic methods for measurement of naturally occurring and human-produced radioactive elements. Results of CEMRC research projects appear in peer-reviewed scientific journals and are presented at national and international meetings.

Contact: Punam Thakur at 575-234-5531, pthakur@cemrc.org

# The Center for Animal Health and Food Safety

The Center was founded in 2007 and is comprised of three primary functional research units:

- Chemical Analysis and Instrumentation Laboratory maintains high-end analytical instrumentation which is available to support collaborative research within NMSU, the State of New Mexico and other educational or industrial partners.
- Food Safety Microbiology Laboratory specializes in research and development of foodborne pathogen detection and control; food product testing, including microbiological analyses, pH, aw; process evaluation of acidified foods, inoculation studies, shelf-life testing, and contracting to establish food safety plans (e.g. HACCP plans, *Listeria* control programs).
- 3. Veterinary Entomology Research Laboratory provides a state-of-the-art large animal research facility located on 45 acres, with a 5000 sq. ft. large animal laboratory, capable of housing 24 animals individually in environmentally controlled rooms. The laboratory maintains multiple insect rearing facilities for major ectoparasites including: house flies, stable flies, horn flies, face flies, mosquitoes, lice, mites and ticks. The facility has outdoor housing for 60 large animals in covered, individual outdoor stanchions, in addition to housing for wildlife species including: deer, elk, bighorn sheep and rabbits.

Director: Dr. Brandon G. Smythe (bsmythe@nmsu.edu) (575) 646-1111)

# **Center for Latin American and Border Studies**

The Center for Latin American and Border Studies (CLABS) was established in 1979 by the College of Arts and Sciences and is located at the Nason House. CLABS supports Frontera NorteSur, an on-line journal about the U.S.-Mexico border. In addition, CLABS supports the collection at the NMSU library, travel for faculty to conferences, language training in Spanish and Portuguese, lectures by visiting speakers, curriculum development for teachers, the student Latin American organization, and other outreach activities. It has a faculty governance organization and helps administer the Nason foundation fund. In recent years the center has pursued an active program of research on U.S.-Mexico border policy issues, in cooperation with several universities in the United States and

Contact: Center for Latin American and Border Studies: https://clabs.nmsu.edu (https://clabs.nmsu.edu/)

# **Chemistry and Biochemistry Research Facilities**

The Department of Chemistry and Biochemistry has a comprehensive equipment base that supports research in nearly all phases of chemistry.

It also has instrumentation dedicated to the department's teaching mission. Major instruments supporting both missions include five nuclear magnetic resonance (NMR) spectrometers ranging from low field (200 MHz) to high field (500MHz), two atomic absorption spectrometers, several UV-Vis spectrometers, two mass spectrometers (LS/MS) and four gas chromotograph instruments. Details about all instruments located in the department's facilities can be accessed at https://chemistry.nmsu.edu/research/research-facilities.html

Contact Instrumentation Facilities: chembche@nmsu.edu ()

# **Cooperative Extension Service**

As a land-grant institution, New Mexico State University has a tripartite mission—instruction, research, and extension. The three parts of this mission are closely interrelated and mutually reinforcing. New Mexico State University's Cooperative Extension Service serves a unique role in New Mexico. As the state's land-grant university, and as mandated by its charter, it is the "leading object" for agriculture, home economics, engineering, business, health sciences, as well as educational programs in the liberal arts and natural sciences. NMSU's uniqueness arises from its vision of teaching/learning, research, and extension/outreach functions—interdependent, mutually supportive and central to its land-grant mission.

The extension aspect of the university's mission is the process of extending the intellectual expertise and resources of the university through teaching and applied research to address the social, civic, economic and environmental challenges and opportunities facing our state, region, nation, and global community. Extension entails an organized and planned program of activities; these activities bring the resources of the university to bear in a coherent and strategic fashion for the benefit of the citizens of New Mexico and the nation. Many faculty have split appointments with the Agricultural Experiment Station and serve as graduate advisors for students interested in extension as a career. For more information see <a href="http://extension.nmsu.edu/">http://extension.nmsu.edu/</a>.

# **Core University Research Resources Laboratory**

The Core University Research Resources Laboratory (CURRL) is a campus-wide, core facility providing all levels of technical support and consultation for investigators needing analytical and routine transmission, scanning electron microscopy, and light microscopy services. The integrated imaging facility is administered through the Office of the Vice President for Research and is considered a core research facility. The facility was established to furnish state-of-the-art microscopy instrumentation and techniques to investigators and their students for research and training.

Director: Dr. Tanner Schaub (tschaub@nmsu.edu)

https://research.nmsu.edu/RCP.html

# **Dissect Laboratory**

DISSECT (Discovering Science through Computational Thinking) is a laboratory established by a joint team of researchers from the Department of Computer Science and the College of Education. The lab is housed in Computer Science on the second floor of the Science Hall. DISSECT provides physical space and facilities to nurture interactions between computational scientists and educational researchers in order to develop innovative technologies that will expose K-12 students to fundamental principles of computing. The laboratory provides

workspaces and high-performance workstations for graduate students as well as a dedicated network and offices for researchers and visitors.

https://www.cs.nmsu.edu/gk-12/?page\_id=1186

Program Coordinator: Raena Cota gk12@cs.nmsu.edu

# **Engineering Research Center**

The mission of the College of Engineering's Engineering Research Center (ERC) is to support the faculty and staff of the college in building research programs of nationally and internationally recognized excellence. The ERC assist faculty and staff in their pursuit of research funding, management of their research, and in ensuring research activities are in compliance with all relevant laws and regulations.

The ERC disseminates information to the college regarding state, national and international research trends, programs and policies. The ERC identifies potential funding opportunities and calls for proposals that may be a fit for college faculty and staff. The ERC works with the Office of the Vice President for Research and the other NMSU colleges to bring together multi-disciplinary teams.

Engineering Research Center for Bio-Mediated and Bio-Inspired Geotechnics (CBBG), Engineering Research Center for Re-inventing the Nation's Urban Water Infrastructure (ReNUWIt), Tran-Set: Transportation Consortium of South-Central States, and iCREDITS: Interdisciplinary Center of Research Excellence in Design of Intelligent Technologies for Smart Grids.

For proposal preparation, the ERC pre-award team assists the faculty with interpretation of sponsor guidelines, development of the proposal budget, completion of standardized forms, review of the proposal for adherence to sponsor requirements, and submission to the NMSU Office of Grants and Contracts for their review and final submission. The post-award staff assist the faculty and staff with award management, including working with the NMSU Sponsored Projects Accounting office. The ERC is responsible for financial management of college grants and contracts. https://engr.nmsu.edu/Research/page-five.html

Contact: Dr. Phillip DeLeon (pdeleon@nmsu.edu)

# Freeport-McMoran Copper & Gold Water Quality Laboratory

The Water Quality Laboratory in the College of Engineering was established by a gift from Freeport-McMoRan. It is located in ECIII rooms 106 and 110. Current capabilities of the lab include:

- Dionex ICS-2100 Ion Chromatographic System (ICS) with an AS-DV autosampler, the ICS-2100 is configurable for either anions or cations;
- PerkinElmer Elan DRC-e Inductively Coupled Plasma for Mass Spectrometry (ICP/MS) with dynamic reaction cell (DRC) capability;
- Perkin Elmer Series 200 High-Performance Liquid Chromatography (HPLC) with UV/Vis Detection;
- Gas Chromatography (Agilent model 7890) using a mass spectrometer detector (Agilent model 5975C) (GC/MS) using an Agilent 7693 autosampler;
- A 16-vessel Multiwave 3000 Microwave Reaction System by Anton Paar:
- Micromeritics ASAP 2050 High Pressure Sorption Analyser that uses a dewar with liquid nitrogen or antifreeze for temperature control. The

antifreeze temperature is controlled from -20° to +75° Celsius using a PolyScience PD15R-30 recirculator bath;

- Shimadzu TOC-Vcsh Total Organic Carbon Analyser (TOC) with a Total Nitrogen Measurement Unit (TNM-1) option;
- Malvern Zetasizer Nano ZS for zeta potential and size measurement of suspended particles;
- Anton Paar Surpass for zeta potential measurement of membranes, granules, or fiber particles; and
- · a Millipore Direct Q3 water purification system.

Analyses may be performed by a researcher after receiving training on the device.

Contact: Dr. Phillip DeLeon, pdeleon@nmsu.edu, https://wordpress.nmsu.edu/mchidest/

# **Geochemistry Research Laboratory**

The Department of Geological Sciences houses a number of analytical instruments, all of which are available for use by graduate students, undergraduate researchers, and faculty. The department houses a Laser-Ablation Multi-Collector Inductively Coupled Plasma Mass Spectrometer (LA-MC-ICPMS) for analysis of istopic ratios of microsamples, an X-ray fluorescence spectrometer for geochemical analysis of rocks and other solid materials, a thermal ionization mass spectrometer for analysis of isotopic ratios of solids and liquids, and a laser-induced breakdown spectrometer for the analysis of solid materials. Sample preparation equipment is available to support research on these instruments. In addition, mineral separation equipment including a jaw crusher, Gemini shaker table, Franz magnetic separator, and heavy liquids, is available for geochronologic or other mineralogic research projects.

Contact: Dr. Nancy McMillan (nmcmilla@nmsu.edu)

# ICredits: Interdisciplinary Center of Research Excellence in Design of Intelligent Smartgrids Technologies

The Center, funded through a grant from the National Science Foundation, is focused on the development of novel hardware/software technologies and methodologies to enable the design, development, deployment and evaluation of microgrids and smartgrids. The Center is housed in Science Hall; it supports research activities at the boundaries between power systems and computer science. The Center also promotes the development of educational and outreach activities aimed at enhancing the awareness and training in all areas relevant to the smartgrids vision.

Contact: Dr. Enrico Pontelli (epontell@nmsu.edu)

# **Institute for Energy and the Environment**

The Institute for Energy & the Environment (IEE) is a unit within the Engineering Research Center IEE's programmatic efforts focus on interdisciplinary research, education, and outreach to develop comprehensive solutions for environmental, energy and water challenges in the southwestern United States and worldwide. IEE offers opportunity for conducting research to the graduate and undergraduate students at NMSU. IEE's major objectives include renewable energy, biofuel, advanced water treatment and desalination, and advancing education, training and outreach in areas of environment, energy and water.

Director: Dr. Phillip DeLeon (pdeleon@nmsu.edu)

# Knowledge Discovery and Data Mining (KDD) Research Lab

The Knowledge Discovery and Data Mining (KDD) research lab aims at advancing techniques for the effective management and analysis of complex data (e.g., sequence data, graph data, semi-structured data). The laboratory conducts research in modeling, storing, querying, and mining large amount of complex data at both theory and application levels. The laboratory keeps active collaborations with scientists from other Computer Science areas and scientific disciplines to broaden the usage of data management and data mining techniques. The laboratory is located in Science Hall, Rm. 153.

**Director:** Huiping Cao

# Knowledge Representation, Logic and Advanced Programming Laboratory (KLAP)

The KLAP lab was established in 1994 through an RIMI grant from the National Science Foundation and has developed into a focal research laboratory of international reputation. It is housed in the Department of Computer Science. KLAP's research focus is to advance state-of-the-art knowledge in Artificial Intelligence and High Performance Computing and its application in diverse interdisciplinary domains such as bioinformatics and assistive technologies.

The lab provides a full meeting space (with multimedia projection capabilities), access to eight high performance work stations, a dedicated high performance computing server and a 40-core Infiniband Beowulf cluster. The lab has hosted international researchers and has graduated approximately 100 graduate students with MS and Ph.D. degrees. It has attracted almost \$10,000,000 in external funding. https://www.cs.nmsu.edu/klap/

Director: Dr. Enrico Pontelli (epontell@cs.nmsu.edu)

# Networks and Systems Optimization Lab (NSOL)

The Networks and Systems Optimization Laboratory (NSOL) supports research in networking and communication including, but not limited to: wireless networks, the Internet, supercomputing networks, and online social networks. This research includes optimization problems, protocol design and development, hardware design and development, and mechanisms for improving security and privacy of communications (including cybersecurity). The lab has a 24 core blade server (RAID-10) that is used for extended simulations and back-up, five desktops, five laptops, and four smartphones, which form a networking testbed.

Director: Satyajayant "Jay" Misra https://computerscience.nmsu.edu/research/groups-labs.html

# **New Mexico Department of Agriculture**

The New Mexico Department of Agriculture (NMDA), under the control of the NMSU Board of Regents, is responsible for administering laws and regulations that daily affect the lives of every citizen of the state. These laws and regulations (concerning the production, preparation, processing, sale, and use of agricultural products; weights and measures; and petroleum products) are designed to assist producers, processors, and consumers. NMDAs marketing program provides guidance to commodity groups in the promotion of agricultural products.

A broad consumer service in many areas other than agriculture is provided by the department. NMDAs director is New Mexico's secretary of agriculture and serves on the governor's cabinet as a liaison between state government and the agricultural industry. For further information, e-mail: pio@nmda.nmsu.edu. NMDAs web site is at http://www.nmda.nmsu.edu

# **New Mexico State University Library**

The New Mexico State University Library is a Destination for Discovery that offers access to rich content and research-level collections in two library facilities located in the heart of the campus. Zuhl and Branson libraries house over 1.8 million items and provide electronic access to scholarly journals and databases for both general academic and discipline-specific research. View the large geological collection and artworks on display at Zuhl Library and explore historical collections within the Archives and Special Collections Department at Branson Library. Reference assistance and research support are provided by a team of faculty and staff dedicated to student learning and success. There are a variety of study areas available including quiet and group spaces, some of which can be reserved. Over 100 PCs, scanners, laptops, and other resources are available for students to use. More detailed information may be found at http://lib.nmsu.edu.

# New Mexico Water Resources Research Institute

The New Mexico Water Resources Research Institute (WRRI) at NMSU, established in 1963, was one of the first of 54 water institutes in the United States. The WRRI program encompasses all state universities in New Mexico and public agencies sponsoring water research. The institute serves as a coordinator, assisting researchers in obtaining funds, working with granting agencies, and serving as the administrator for projects. The annual budget of approximately \$1.5 million is made available from federal, state, and/or private sources through a variety of grants and contracts. All research projects administered by the institute encourage graduate student participation. As a result, about 30 students a year receive scientific training through institute-sponsored projects. WRRI also sponsors the Annual New Mexico Water Conference, which has provided a public forum for state water issues since 1956. Public participation helps the institute focus its research program on areas of greatest need. The WRRI publishes research results of every project it administers and other miscellaneous reports. The WRRI also maintains a water resources reference room with 2,000 books and documents and the ability to link to 10,000 water-related documents on water issues facing the state and the nation. E-mail may be sent to nmwrri@nmsu.edu. The WRRIs homepage address is http://nmwrri.nmsu.edu/.

# Oak Ridge Associated Universities Program (ORAU)

Since 1991, students and faculty of New Mexico State University benefited from its membership in Oak Ridge Associated Universities (ORAU). ORAU is a consortium of 98 colleges and universities and a contractor for the U.S. Department of Energy (DOE) located in Oak Ridge, Tennessee. ORAU works with its member institutions to help their students and faculty gain access to federal research facilities throughout the country; to keep its members informed about opportunities for fellowship, scholarship, and research appointments; and to organize research alliances among its members.

Through the Oak Ridge Institute for Science and Education (ORISE), the DOA facility that ORAU operates, undergraduates, graduates, postgraduates, as well as faculty enjoy access to a multitude of opportunities for study and research. Students can participate in programs covering a wide variety of disciplines including business, earth sciences, epidemiology, engineering, physics, geological sciences, pharmacology, ocean sciences, biomedical sciences, nuclear chemistry, and mathematics. Appointment and program length range from one month to four years. Many of these programs are especially designed to increase the numbers of underrepresented minority students pursuing degrees in science- and engineering-related disciplines. A comprehensive listing of these programs and other opportunities, their disciplines, and details on locations and benefits can be found in the ORISE Catalog of Education and Training Programs, which is available at http://www.orau.org, or by calling either of the contacts below.

ORAU's Office of Partnership Development seeks opportunities for partnerships and alliances among ORAU's members, private industry, and major federal facilities. Activities include faculty development programs, such as the Ralph E. Powe Junior Faculty Enhancement Awards, the Visiting Industrial Scholars Program, consortium research funding initiatives, faculty research and support programs as well as services to chief research officers.

For more information about ORAU and its programs, contact:

Dr. Luis Cifuentes - Vice President for Research (575) 646-2481

ORAU Corporate Secretary (865) 576-3306; or Visit the ORAU Home Page (http://www.orau.org)

# **Physics Research Facilities**

The Department of Physics operates a PANalytical Empyrean x-ray diffractometer for low-resolution powder diffraction, high-resolution diffraction, reciprocal space mapping with a triple-axis crystal, and x-ray reflectance. It also operates a J.A. Woollam variable angle of incidence ellipsometer (VASE) with a computer-controlled Berek waveplate compensator for measurements from 190 to 2500 nm, at room temperature and from 80 to 800 K. Both instruments are integrated into CURRL and available to the campus community and off-campus users for a fee. See https://phys.nmsu.edu/research/research-programs.html for more information.

Contact Dr. Stefan Zollner (zollner@nmsu.edu).

# Play and Interactive Experiences for Learning Lab (PIXL)

The Play and Interactive Experiences for Learning (PIxL) Lab works at the intersection of games, human-computer interaction, and mixed reality, developing game experiences that educate and function as scientific experiments in HCI. Projects center around the best means of interfacing with games, including keyboard and mouse and controllers all the way to gesture-based input, wearable systems and mixed reality. Prior research has investigated the use of games for training firefighters, and ongoing research applies this to disaster response in general and military projects. The lab provides space for students, as well as access to workstations, a modular wearable computer, tracking sensors and games.

Director. Zachary O. Toups (ztoups@nmsu.edu)

# Programming Languages Environments and Software Engineering (PLEASE) Laboratory

The PLEASE lab pursues research in the practical aspects of software development, including programming languages, programming environments, and software engineering. The lab is housed in Science Hall 167 and includes workstations and work space for graduate students pursuing research in relevant areas.

Director: Jonathan Cook http://www.cs.nmsu.edu/please

# **Psychology Research Facilities**

The Department of Psychology emphasizes research in social psychology, engineering psychology, and cognitive psychology. Faculty investigate such issues as mother-infant interactions and the impact of cortisol responses to stress upon development; visual search; human factors research; auditory perception; prospective memory; emotion and social decision-making; evolutionary psychology; skill acquisition; social cognition; perception and action; embodied cognition; cognitive neuroscience (control of attention, neural dynamics; and brain-computer interfaces); and research and statistical analysis methods.

All faculty have designated labs with a large central area and 3-4 smaller adjacent rooms. This facilitates data collection from small groups or individuals. Research using the department's subject pool is managed with an online system.

The department has specialist facilities that include an EyeLink 1000 eye tracking system with experiment builder software; two 128 channel Biosemi ActiView-2 EEG systems and two shielded rooms; eight analysis workstations; and a Neuroconn DC Stimulator Plus tDCS stimulator. The lab collaborates with the Mind Research Network that has access to a Siemens 3T Trio research MR scanner, a Magvis 132 channel MEG system, and Biosemi and Geodysics EEG systems. The Auditory Perception Lab has a remote-controlled robot with binocular vision and stereo audition that is used to assess auditory performances in applied settings; another remote controlled robot to test perceptual interfaces for remotely-operated vehicles; a 30-element speaker array to simulate real-world auditory environments; and two portable eye trackers housed in the PACMANE (Perception, Action and Cognition in Mediated, Artificial and Naturalistic Environments) lab.

For more information: https://psychology.nmsu.edu/pages/subpages/fac-research.html

# Research Initiatives in the College of Education

The College of Education has research initiatives and labs in the following areas:

- The Kinesiology and Dance Department offers lab space for the study of biomechanics, sport psychology & motor learning, applie and basic physiology, healthy aging, physical education curriculum and kinesthetic learning.
- The Speech and Hearing Center's Benfer for voice and speech science research
- The Special Education/Communication Disorders Department's Autism Research Initiative.

- Alliance for the Advancement of Teaching and Learning in collaboration with the Southwest Regional Educational Lab REL (Institute for Educational Services, IES) provides research for partner school district practitioners on accountability, special education/ response to intervention, literacy, leadership development, math and science achievement, and program evaluation.
- The Institute for Mathematics and Science Education oversees multiple mathematics and science grants as well as serving as the STEM Outreach Center for K-12 education.
- The Counseling and School Psychology Training and Research Center provides counseling services for students, training for graduate students in counseling, school psychology and counseling psychology, and conducts research on counseling outcomes and processes.
- A Reading Research Center is housed in the NMSU Children's Village and provides reading diagnostic services including analysis of reading using eye-tracking software.

# **Southwest Institute for Health Disparities Research**

To address the substantial health disparities that exist in Southern New Mexico and the U.S./Mexican Border Region, New Mexico State University has recently established the Southwest Institute for Health Disparities Research within the College of Health and Social Services. The purpose of the Institute is to assist faculty to secure external funding and conduct research which has the potential to reduce health disparities and improve minority health, provide health related community outreach programming, provide training for researchers, lay groundwork for additional funded research, and attract highly qualified minority faculty and graduate students to NMSU.

https://swihdr.nmsu.edu (https://swihdr.nmsu.edu/)

Dr. Jill McDonald (jillmcd@nmsu.edu)

# **Southwest Technology Development Institute (SWTD)**

SWTDI, formally the Southwest Regional Experimental Station or SWRES, was established in 1977 under DOE funding as a Photovoltaic research center. Over the last 30 years SWTDI has conducted extensive long term panel, inverter, and systems testing providing significant contribution to the field. One substantial consequence of the system testing has been the accumulation of knowledge related to the safety, installation methodology, design, and development industry standards in PV. Today SWTDI continues to be a leader in education and development of article 690 of the National Electric Code (NEC), Solar Photovoltaic Systems and continues its research in long term panel and inverter testing. However in 2012 SWTDI integrated with the Electrical and Computer Engineering Department of NMSU to broaden the research focus and has developed a microgrid for expanded research into renewable integration into the electric grid and demonstration of ongoing collaborative research with the ECE department on industry partners.

https://ece.nmsu.edu (https://ece.nmsu.edu/)

# **Spatial Applications and Research Center** (SPARC)

The SpARC laboratory was established in 1982 as an applied contract research laboratory for the NMSU Geography Department. SpARC

provides a variety of services including planning and research, GIS, image processing, modeling and training. The original purpose of the laboratory was to undertake externally funded projects under the direction of geography faculty and employ students within the department. Thirty-four years later, the laboratory continues to do project related work. It has employed more than 150 students, and provided assistance to more than 35 faculty members inside and outside Geography. The primary clients of the lab have been federal state and local government agencies, with an emphasis on applied transportation, water resource, and environmental research projects. The lab houses 11 high performance workstations, a range of mapping grade GPS units, and a large scanner/plotter. Software available for use includes database software, ENVI image processing software, TransCAD, and the entire suite of Esri GIS software. http://smiley.nmsu.edu/SparcWebsite/BGIS2Index\_2012.html

Director: Dr. Christopher Brown (brownchr@nmsu.edu; (575) 646-1892)

### **Crimson Research**

Crimson Research is designed to assist researchers, agency directors, business leaders, and policy makers in all aspects of survey research and program evaluation. Housed in the College of Health, Education and Social Transformation, the Center has state-of-the-art hardware and software for conducting phone and internet surveys of any type and length as well as facilities for conducting face-to-face interviews and focus groups. Crimson Research provides a wide array of services: questionnaire design, sampling, data collection, and statistical analysis for telephone, mail, and internet surveys. Center staff are also able to assist and conduct all forms of program evaluation from formative to summative approaches, including process, outcome and impact evaluations. Bilingual (Spanish/English) questionnaire translation and interviewing are also available. https://publichealth.nmsu.edu/research\_and\_outreach/crimson\_reasearch.html

Director: Dr. Joe Tomaka (tomaka@nmsu.edu; (575) 646-3525)

# **University Museum**

Established in 1959, the New Mexico State University Museum has provided 50 years of service to the university and community. The University Museum assists NMSU in providing quality education, advancing knowledge through research, and celebrating the culture and history of the southwest and the University. The Museum serves the community as a repository and exhibitor of local and regional history and culture. Through its care and maintenance of donated ethnographic, historic and prehistoric objects, it preserves an important part of Southwestern and Border region culture and history. The Museum encourages faculty and student research using our diverse cultural materials.

The Museum's collections are primarily anthropological (archaeological and ethnographic) with secondary collections in history and the natural sciences. Anthropological collections document the cultural diversity of the border in the Greater Southwest and northern Mexico. The Museum preserves and catalogs collections to promote research and access to cultural materials. Exhibits are developed by students and staff as well as brought in from other institutions.

https://univmuseum.nmsu.edu (https://univmuseum.nmsu.edu/)

Director: Dr. Fumi Arakawa (farakawa@nmsu.edu)

Curator. Dr. Kristin Otto, krotto@nmsu.edu

### **Masters Degrees**

### A

- Accounting Master of Accountancy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/accounting-masteraccountancy/)
- Aerospace Engineering Master of Engineering in Aerospace Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/aerospace-engineering-master-engineering/)
- Aerospace Engineering Master of Engineering in Aerospace Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/ online/nmsu-online/aerospace-engineering-meae-online/)
- Aerospace Engineering Master of Science (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ aerospace-engineering-master-science/)
- Agricultural and Extension Education (Agricultural Strategic Communications) - Master of Arts (Online) (http:// catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/ agricultural-extension-education-agricultural-strategic-comm-ma-online/)
- Agricultural and Extension Education Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/agricultural-extension-education-ma/)
- Agricultural and Extension Education Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/agricultural-extension-education-ma-online/)
- Agricultural Biology Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/agricultural-biologymaster-science/)
- Agricultural Economics Master of Science (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ agricultural-economics-ma-science/)
- Agriculture (Agribusiness) Master of Agriculture (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ agriculture-agribusiness-ma-agriculture/)
- Agriculture (Agribusiness) Master of Agriculture (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/agriculture-agribusiness-mag-online/)
- Agriculture (Domestic Animal Biology) Master of Agriculture (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/agriculture-domestic-animal-biology-ma-agriculture/)
- Animal Science Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/animal-science-mascience/)
- Anthropology Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/anthropology-masterarts/)
- Applied Statistics Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/applied-statistics-masterscience/)
- Art Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/art-master-arts/)
- Astronomy Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/astronomy-masterscience/)

 Athletic Training - Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/athletic-training-masterscience/)

#### B

- Bioinformatics Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/bioinformatics-masterscience/)
- Biology Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/biology-master-science/)
- Business Administration (Agribusiness) Master of Business Administration (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/business-administration-agribusiness-master-business-administration/)
- Business Administration (Finance) Master of Business Administration (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/business-administration-finance-master-business-administration/)
- Business Administration (Health Services Management) Master of Business Administration (http://catalogs.nmsu.edu/
   archive/2023-2024/nmsu/graduate-school/business-administration-health-services-management-master-business-administration/)
- Business Administration (Health Services Management) Master of Business Administration (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/business-administrationhealth-services-mgt-mba-online/)
- Business Administration (Information Systems) Master of Business Administration (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/business-administration-information-systems-master-business-administration/)
- Business Administration (Information Systems) Master of Business Administration (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/business-administrationinformation-systems-mba-online/)
- Business Administration (Public Utility Regulations) Master of Business Administration (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/business-administrationpublic-utility-regulations-master-business-administration/)
- Business Administration (Public Utility Regulations) Master of Business Administration (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/business-administrationpublic-utility-regulations-mba-online/)
- Business Administration Master of Business Administration (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/business-administration-master-business-administration/)
- Business Administration Master of Business Administration (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/ business-administration-mba-online/)

### C

- Chemical Engineering Master of Science in Chemical Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/chemical-engineering-master-science-chemical-engineering/)
- Chemical Process Industry Master of Engineering in Chemical Process Industry (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/chemical-process-industry-masterengineering/)

- Chemical Process Industry Master of Engineering in Chemical Process Industry (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/chemical-process-industry-mecpi-online/)
- Chemistry Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/chemistry-masterscience/)
- Civil Engineering Master of Engineering in Civil Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/civilengineering-master-engineering/)
- Civil Engineering Master of Engineering in Civil Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/civil-engineering-mece-online/)
- Civil Engineering Master of Science in Civil Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/civil-engineering-master-science-civil-engineering/)
- Clinical Mental Health Counseling Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/clinical-mental-health-counseling-master-arts/)
- Clinical Psychopharmacology (Postdoctoral) Master of Science (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/clinical-psychopharmacology-postdoctoral-ms-online/)
- Communication Disorders Master of Arts (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ communication-disorders-master-arts/)
- Communication Studies (Analysis and Decision-Making) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/ nmsu-online/communication-studies-analysis-decision-making-maonline/)
- Communication Studies (Leadership Communication) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/ nmsu-online/communication-studies-leadership-communication-maonline/)
- Communication Studies Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/communication-studiesmaster-arts/)
- Computer Science Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/computer-science-master-science/)
- Counseling and Guidance (Educational Diagnostics) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/counseling-guidance-educational-diagnostics-ma/)
- Creative Writing Master of Fine Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/creative-writing-masterfine-arts/)
- Criminal Justice Master of Criminal Justice (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ criminal-justice-master-criminal-justice/)
- Criminal Justice Master of Criminal Justice (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/criminal-justice-mcj-online/)

### D

 Data Analytics (Digital Agriculture) - Master of Data Analytics (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/ data-analytics-digital-agriculture-mda-online/)

- Data Analytics Master of Data Analytics (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/data-analytics-masterdata-analytics/)
- Data Analytics Master of Data Analytics (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/data-analytics-mda-online/)

#### Ε

- Economics (Econometrics) Master of Arts (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ economics-econometrics-master-arts/)
- Economics (Econometrics) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/economics-econometrics-ma-online/)
- Economics (Public Policy) Master of Arts (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ economics-public-policy-master-arts/)
- Economics (Public Policy) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/economics-public-policy-ma-online/)
- Economics (Public Utility Policy and Regulation) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/economics-public-utility-policy-regulation-master-arts/)
- Economics (Public Utility Policy and Regulation) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/economics-public-utility-policy-regulation-ma-online/)
- Economics Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/economics-master-arts/)
- Economics Master of Arts (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/economics-ma-online/)
- Education (Bilingual Education) Master of Arts (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ education-bilingual-education-master-arts/)
- Education (Curriculum & Instruction) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-curriculum-instruction-master-arts/)
- Education (Curriculum & Instruction) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-curriculum-instruction-ma-online/)
- Education (Early Childhood Education Plus Licensure) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-early-childhood-ed-plus-licensure-ma-online/)
- Education (Early Childhood Education Plus Licensure) Masters of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-early-childhood-education-plus-licensure-master-arts/)
- Education (Early Childhood Education) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-early-childhood-education-master-arts/)
- Education (Early Childhood Education) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-early-childhood-ed-ma-online/)
- Education (Educational Learning Technologies) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-educational-learning-technologies-ma-online/)
- Education (Elementary Licensure Prep) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-elementary-licensure-prep-master-arts/)

- Education (Elementary Licensure Prep) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-elementary-licensure-prep-ma-online/)
- Education (Elementary Mathematics and Science) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduateschool/education-elementary-mathematics-science-master-arts/)
- Education (Language, Literacy & Culture) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-language-literacy-culture-ma-online/)
- Education (Language, Literacy, & Culture) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-language-literacy-culture-master-arts/)
- Education (Secondary Licensure Prep) Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-secondary-licensure-prep-master-arts/)
- Education (Secondary Licensure Prep) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/education-secondary-licensure-prep-ma-online/)
- Education (Spanish) Master of Arts in Teaching (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ education-spanish-master-arts-teaching/)
- Education (Teaching English to Speakers of Other Languages) -Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/education-tesol-master-arts/)
- Educational Leadership & Administration (Higher Education Administration) - Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/educational-leadershipadministration-higher-education-administration-master-arts/)
- Educational Leadership & Administration (Pk-12 Administration)
   Master of Arts (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/educational-leadership-administration-pk-12-administration-master-arts/)
- Educational Leadership & Administration (Higher Education Administration) - Master of Arts (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/educational-leadershipadministration-higher-ed-admin-ma-online/)
- Educational Leadership & Administration (Pk-12 Administration)
   Master of Arts (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/educational-leadershipadministration-pk12-admin-ma-online/)
- Electrical Engineering Master of Engineering in Electrical Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/electrical-engineering-master-engineering-electrical-engineering/)
- Electrical Engineering Master of Engineering in Electrical Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/ online/nmsu-online/electrical-engineering-meee-online/)
- Electrical Engineering Master of Science in Electrical Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduateschool/electrical-engineering-master-science-electrical-engineering/)
- Electrical Engineering Master of Science in Electrical Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/electrical-engineering-msee-online/)
- English (Technical and Professional Communication) Master of Arts (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/english-technical-professional-communication-ma-online/)
- English Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/english-master-arts/)

- Environmental Engineering Master of Science in Environmental Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/environmental-engineering-master-scienceenvironmental-engineering/)
- Experimental Psychology Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/experimental-psychologymaster-arts/)

#### F

- Family and Consumer Sciences (Couples, Marriage and Family Therapy) - Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/family-consumersciences-couples-marriage-family-therapy-ms/)
- Family and Consumer Sciences (Food Science and Technology) -Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/family-consumer-sciences-food-science-techms/)
- Family and Consumer Sciences (Hotel, Restaurant and Tourism Management) - Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/family-consumersciences-hrtm-ms/)
- Family and Consumer Sciences (Human Nutrition & Dietetic Sciences) - Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/family-consumersciences-hnds-ms/)
- Fine Arts Master of Fine Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/fine-arts-master-finearts/)
- Fish, Wildlife and Conservation Ecology Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/fish-wildlife-conservation-ecology-master-science-fwce/)

#### G

- Geography Master of Applied Geography (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/geography-masterapplied-geography/)
- Geology Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/geology-master-science/)
- Government Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/government-master-arts/)

#### Н

- History (Public History) Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/history-public-historymaster-arts/)
- History Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/history-master-arts/)
- Horticulture Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/horticulture-masterscience/)

#### ı

- Industrial Engineering Master of Engineering in Industrial Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/industrial-engineering-master-engineering/)
- Industrial Engineering Master of Engineering in Industrial Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/industrial-engineering-meie-online/)

- Industrial Engineering Master of Science in Industrial Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/industrial-engineering-master-science-industrial-engineering/)
- Industrial Engineering Master of Science in Industrial Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/industrial-engineering-msie-online/)
- Information Technology Master of Information Technology (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/information-technology-mit-online/)

#### M

- Master of Public Health/Master of Social Work Dual Degree (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/master-public-health-master-social-work-dual-degree/)
- Mathematics Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/mathematics-masterscience/)
- Mechanical Engineering Master of Engineering (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/mechanical-engineering-meme-online/)
- Mechanical Engineering Master of Engineering in Mechanical Engineering (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/mechanical-engineering-master-engineering/)
- Mechanical Engineering Master of Science in Mechanical Engineering (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/mechanical-engineering-master-science-mechanical-engineering/)
- Molecular Biology Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/molecular-biology-masterscience/)
- MPA-MCJ Program Dual Degree (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/mpa-mcj-program-dualdegree/)
- Music (Conducting) Master of Music (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/music-conducting-mastermusic/)
- Music (Music Education) Master of Music (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ music-music-education-master-music/)
- Music (Music Education) Master of Music (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/music-music-education-mm-online/)
- Music (Performance) Master of Music (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/music-performancemaster-music/)

#### N

 Nursing Leadership and Administration - Master of Science in Nursing (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/nursing-leadership-administration-msn-online/)

#### Ρ

- Physics (Space Physics) Master of Science (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ physics-space-physics-master-science/)
- Physics Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/physics-master-science/)

- Plant and Environmental Science Master of Science (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/plantenvironmental-science-master-science/)
- Public Administration Master of Public Administration (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/public-administration-master-public-administration/)
- Public Health (Health Behavior & Health Promotion) Master of Public Health (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/ nmsu-online/public-health-health-behavior-health-promotion-mphonline/)
- Public Health (Health Behavior and Health Promotion) Master of Public Health (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/public-health-health-behavior-health-promotionmaster-public-health/)
- Public Health (Health Management, Administration & Policy) Master of Public Health (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/public-health-health-managementadministration-policy-master-public-health/)
- Public Health (Health Management, Administration & Policy)
   Master of Public Health (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/public-health-health-mgt-admin-policy-mph-online/)
- Public History and Public Administration Dual M.A. Degree (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/public-history-public-administration-dual-ma-degree/)

#### R

 Range Science - Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/range-science-masterscience/)

#### S

- Social Work Master of Social Work (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/social-work-master-socialwork/)
- Social Work Master of Social Work (Online) (http:// catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/socialwork-msw-online/)
- Sociology Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/sociology-master-arts/)
- Sociology Master of Arts (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/sociology-ma-online/)
- Spanish Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/spanish-master-arts/)
- Spanish Master of Arts (Online) (http://catalogs.nmsu.edu/ archive/2023-2024/online/nmsu-online/spanish-ma-online/)
- Special Education Master of Arts (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/special-education-masterarts/)
- Special Education Master of Arts (Online) (http:// catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/specialeducation-ma-online/)

### W

 Water Science and Management (Agricultural Water Resources) -Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/water-science-management-agriculturalwater-resources-master-science/)

- Water Science and Management (International Water Resilience) -Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/water-science-management-international-water-resilience-master-science/)
- Water Science and Management (Water Economics and Policy) -Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/water-science-management-water-economics-policy-master-science/)
- Water Science and Management (Water Informatics) Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/water-science-management-water-informatics-master-science/)
- Water Science and Management (Water Quality and Treatment) -Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/water-science-management-water-qualitytreatment-master-science/)
- Water Science and Management (Watersheds and Aquatic/ Riparian Wetlands) - Master of Science (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/water-sciencemanagement-watersheds-aquatic-riparian-wetlands-master-science/)
- Water Science and Management Master of Science (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/water-science-management-master-science/)

# **Advanced Manufacturing - Concentration**

The graduate concentration in advanced manufacturing educates students and creates a skilled workforce for the growing needs of new technologies and advanced products in the 21st century. The program provides hands-on experience on designing, adapting, and building parts using advanced materials by including new processes, changing the supply chain, and adapting business models. It also includes the design optimization, materials selection and characterization, process parameter mapping, data analytics, software development, and final part inspection among other concepts. This concentration is maintained by the College of Engineering but is open to any Master's level major/degree.

Prefix	Title	Credits
Required Courses		
I E 575	Advanced Manufacturing Processes	3
I E 571	Advanced Quality Control	3
C E 510	Introduction to Nondestructive Testing	3
CHME 564	Polymer Science & Engineering	3
CHME 491/AGRO 450	Undergraduate Special Topics (AGRO 450 CHME 491 Development of Agricultural Technologies)	3
Electives		
5 Electives (Select 500 Level Courses from EE, CHME, IE, CE, or MAE) <sup>1</sup>		15
Total Credits		30

<sup>1</sup> With Approval of the advisor and instructor

#### Selection of Advisor

Newly admitted graduate students will be assigned a temporary advisor for the first semester, but they must select a degree option and permanent advisor before registering for the second semester.

In considering a decision about option and advisor, the student should arrange to meet with several members of the graduate faculty during the first six weeks of study to discuss specific educational objectives. The

student can use these meetings to become familiar with faculty interests and research projects currently in progress. The faculty member must agree (in writing) to serve as the student's advisor.

Although there is no oral exam, students will be required to complete an exit-interview with one of Advanced Manufacturing concentration and one graduate faculty member from the master of engineering they select to study.

# **Doctoral Degrees**

### A

- Aerospace Engineering Doctor of Philosophy (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ aerospace-engineering-doctor-philosophy/)
- Animal Science Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/animal-science-doctorphilosophy/)
- Applied Statistics Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/applied-statistics-phd/)
- Astronomy Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/astronomy-doctorphilosophy/)

### B

- Biology Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/biology-doctorphilosophy/)
- Business Administration (Management) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduateschool/business-administration-management-doctor-philosophy/)
- Business Administration (Marketing) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/business-administration-marketing-doctor-philosophy/)

#### C

- Chemistry Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/chemistry-doctorphilosophy/)
- Computer Science Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/computer-science-doctorphilosophy/)
- Counseling Psychology Doctor of Philosophy (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ counseling-psychology-doctor-philosophy/)
- Curriculum and Instruction Doctor of Philosophy (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ curriculum-instruction-doctor-philosophy/)
- Curriculum and Instruction Doctor of Philosophy (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/curriculum-instruction-phd-online/)

### E

- Economic Development Doctor of Economic Development (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/economics-doctor-economic-development/)
- Educational Leadership & Administration (Higher Education Administration) - Doctor of Education (http://catalogs.nmsu.edu/

- archive/2023-2024/nmsu/graduate-school/educational-leadership-administration-higher-education-administration-doctor-education/)
- Educational Leadership & Administration (Higher Education) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/educational-leadership-administration-highereducation-doctor-philosophy/)
- Educational Leadership & Administration (Pk-12 Administration) -Doctor of Education (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/educational-leadership-administration-pk-12administration-doctor-education/)
- Educational Leadership & Administration (Pk-12 Education) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/ graduate-school/educational-leadership-administration-pk-12education-doctor-philosophy/)
- Engineering (Chemical Engineering) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/engineering-chemical-engineering-doctor-philosophy/)
- Engineering (Civil Engineering) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/engineering-civil-engineering-doctor-philosophy/)
- Engineering (Electrical Engineering) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/engineering-electrical-engineering-doctor-philosophy/)
- Engineering (Industrial Engineering) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/engineering-industrial-engineering-doctor-philosophy/)
- Engineering (Mechanical Engineering) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/engineering-mechanical-engineering-doctor-philosophy/)
- Experimental Psychology Doctor of Philosophy (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ experimental-psychology-doctor-philosophy/)

#### G

 Geography - Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/geography-doctorphilosophy/)

#### Н

 Health Equity Sciences - Doctor of Philosophy (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ health-equity-sciences-phd/)

### K

 Kinesiology - Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/kinesiology-doctorphilosophy/)

#### M

- Mathematics Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/mathematics-doctorphilosophy/)
- Molecular Biology Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/molecular-biology-doctorphilosophy/)

#### N

- Nursing Practice (Family Nurse Practitioner) Doctor of Nursing Practice (Online) (http://catalogs.nmsu.edu/archive/2023-2024/ online/nmsu-online/nursing-practice-family-nurse-practitioner-dnp-online/)
- Nursing Practice (Nurse Anesthesiology) Doctor of Nursing Practice (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/nursing-practice-nurse-anesthesiology-doctor-nursing-practice/)
- Nursing Practice (Population Health Leadership) Doctor of Nursing Practice (Online) (http://catalogs.nmsu.edu/archive/2023-2024/ online/nmsu-online/nursing-practice-population-health-leadership-dnp-online/)
- Nursing Practice (Psychiatric/Mental Health) Doctor of Nursing Practice (Online) (http://catalogs.nmsu.edu/archive/2023-2024/ online/nmsu-online/nursing-practice-psychiatric-mental-health-dnp-online/)
- Nursing Practice Doctor of Nursing Practice (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/nursing-dnp-online/)

#### P

- Physics Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/physics-doctorphilosophy/)
- Plant and Environmental Science Doctor of Philosophy (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/plantenvironmental-science-doctor-philosophy/)

#### R

- Range Science Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/range-science-doctorphilosophy/)
- Rhetoric and Professional Communication Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduateschool/rhetoric-professional-communication-doctor-philosophy/)

### S

 School Psychology - Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/school-psychologydoctor-philosophy/)

### W

- Water Science and Management (Agricultural Water Resources) -Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/water-science-management-agricultural-water-resources-doctor-philosophy/)
- Water Science and Management (International Water Resilience) -Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/water-science-management-internationalwater-resilience-doctor-philosophy/)
- Water Science and Management (Water Economics and Policy) -Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/water-science-management-water-economics-policy-doctor-philosophy/)
- Water Science and Management (Water Informatics) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/

- graduate-school/water-science-management-water-informatics-doctor-philosophy/)
- Water Science and Management (Water Quality Treatments) Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/ nmsu/graduate-school/water-science-management-water-qualitytreatments-doctor-philosophy/)
- Water Science and Management (Watershed and Aquatic/Riparian Wetlands) - Doctor of Philosophy (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/water-sciencemanagement-watershed-aquatic-riparian-wetlands-doctorphilosophy/)
- Water Science and Management Doctor of Philosophy (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/water-science-management-doctor-philosophy/)

### **Graduate Certificates**

- Autism and Spectrum Disorders Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/autism-spectrum-disorders-graduate-certificate/)
- Autism and Spectrum Disorders Graduate Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/autism-spectrum-disorders-gr-certificate-online/)
- Bilingual Education Graduate Certificate (Online) (http:// catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/bilingualeducation-gr-certificate-online/)
- Borderlands and Ethnic Studies Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/borderlands-ethnic-studies-graduate-certificate/)
- Cultural Resource Management Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/cultural-resource-management-graduate-certificate/)
- Digital Communications Graduate Certificate (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ digital-communications-graduate-certificate/)
- Digital Signal Processing Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/digital-signal-processing-graduate-certificate/)
- Early Childhood Alternative Licensure Graduate Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/early-childhood-alt-licensure-gr-cert-online/)
- Electric Energy Systems Graduate Certificate (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ electric-energy-systems-graduate-certificate/)
- Elementary Education Alternative Licensure Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduateschool/elementary-education-alternative-licensure-graduatecertificate/)
- Family Nurse Practitioner Post-Masters Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/family-nurse-practitioner-pm-certificate-online/)
- Finance Graduate Certificate (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/finance-graduatecertificate/)
- Museum Studies Graduate Certificate (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/museum-studiesgraduate-certificate/)

- Online Teaching and Learning Graduate Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/online-teaching-learning-gr-certificate-online/)
- Principal Licensure Graduate Certificate (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/principal-licensuregraduate-certificate/)
- Psychiatric/Mental Health Nurse Practitioner Post-Masters
   Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/psychiatric-mental-health-nurse-practitioner-pmc-online/)
- Public Health Graduate Certificate (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/public-health-graduatecertificate/)
- Public Health Graduate Certificate (Online) (http:// catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/public-health-gr-certificate-online/)
- Public Utility Regulation and Economics Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/public-utility-regulation-economics-graduate-certificate/)
- Public Utility Regulation and Economics Graduate Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/public-utility-regulation-economics-gr-certificate-online/)
- Secondary Education Alternative Licensure Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduateschool/secondary-education-alternative-licensure-graduatecertificate/)
- Special Education Alternative Licensure Graduate Certificate (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/special-education-alternative-licensure-graduate-certificiate/)
- Sustainability Graduate Certificate (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/sustainability-graduatecertificate/)
- Systems Engineering Graduate Certificate (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ systems-engineering-graduate-certificate/)
- Systems Engineering Graduate Certificate (Online) (http:// catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/systemsengineering-gr-certificate-online/)
- Teaching English to Speakers of Other Languages Graduate Certificate (Online) (http://catalogs.nmsu.edu/archive/2023-2024/online/nmsu-online/tesol-gr-certificate-online/)
- Telemetry Graduate Certificate (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/telemetry-graduatecertificate/)

### **Graduate Minors**

- Advanced Manufacturing Graduate Minor (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ advanced-manufacturing-graduate-minor/)
- Agricultural and Extension Education Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/agricultural-extension-education-grad-minor/)
- Animal Science Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/animal-science-graduateminor/)
- Anthropology Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/anthropology-graduateminor/)

- Applied Statistics Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/applied-statisticsgraduate-minor/)
- Archaeology Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/archaeology-graduateminor/)
- Bioinformatics (with Computer Science) Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/bioinformatics-computer-science-graduate-minor/)
- Communication Studies Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/communication-studiesgraduate-minor/)
- Computer Science Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/computer-sciencegraduate-minor/)
- Economics Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/economics-graduateminor/)
- Educational Administration (Doctoral) Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/educational-administration-doctoral-graduate-minor/)
- Educational Administration (Higher Ed.) Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/educational-administration-higher-ed-graduate-minor/)
- Educational Administration (Pk-12) Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/educational-administration-pk-12-graduate-minor/)
- Fish, Wildlife and Conservation Ecology Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/fish-wildlife-conservation-ecology-graduate-minor/)
- Food Studies Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/food-studies-graduateminor/)
- Gender and Sexuality Studies Graduate Minor (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ gender-sexuality-studies-graduate-minor/)
- Geographic Information Systems Graduate Minor (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ geographic-information-systems-graduate-minor/)
- Gerontology Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/gerontology-graduateminor/)
- History Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/history-graduate-minor/)
- Information Systems Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/information-systemsgraduate-minor/)
- Integrated Behavioral Health Care Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/integrated-behavioral-health-care-graduate-minor/)
- Materials Engineering Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/materials-engineeringgraduate-minor/)
- Molecular Biology Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/molecular-biologygraduate-minor/)

- Native American Studies Graduate Minor (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ native-american-studies-graduate-minor/)
- Physics Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/physics-graduate-minor/)
- Psychology Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/psychology-graduateminor/)
- Range Science Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/range-science-graduateminor/)
- School Psychology Specialist in Education (http:// catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/ school-psychology-specialist-education/)
- Security Studies Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/security-intelligencestudy-graduate-minor/)
- Sociology Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/sociology-gr-minor/)
- Spanish Counseling Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/spanish-counselinggraduate-minor/)
- Special Education Graduate Minor (http://catalogs.nmsu.edu/ archive/2023-2024/nmsu/graduate-school/special-educationgraduate-minor/)
- U.S.-Mexico Border Health Issues Graduate Minor (http://catalogs.nmsu.edu/archive/2023-2024/nmsu/graduate-school/us-mexico-border-health-issues-graduate-minor/)