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### For information on graduate admission, contact:

Dean of Graduate Studies
New Mexico Tech
801 Leroy Place
Socorro, NM 87801
575.835.5513
1.800.428.TECH
graduate@nmt.edu

Prospective graduate students, both domestic and international, should use the address above.

#### **Academic Calendar**

#### 2013 Fall Semester

#### Deadline for Intent to Graduate July 1 Orientation for New incoming students August 17 Validation Day August 19 Classes Begin August 19 Late Registration Fees Begin (\$30/day) August 22 Last day to Add a class August 27 Academic Holiday September 2 Non-Validated Student Disenroll September 4 September 6 Last day to drop a class Registration Closes September 6 Midsemester October 9 Academic Holiday October 18 Grade Option Deadline (pass/fail or Audit) November 6 Last Day to Withdraw from a class November 6 Thanksgiving Vacation November 28, 29 Pre-Registration for Spring 2014 December 2-6 Last Day of Classes December 6 Finals Begin December 7 End of Finals December 13 End of Semester December 13

#### 2014 Fall Semester

Deadline for Intent to Graduate Orientation for New incoming students	July 1 August 16
Validation Day	August 18
Classes Begin	August 18
Late Registration Fees Begin (\$30/day)	August 21
Last day to Add a class	August 26
Academic Holiday	September 01
Non-Validated Student Disenroll	September 03
Last day to drop a class	September 05
Registration Closes	September 05
Midsemester	October 08
Academic Holiday	October 17
Grade Option Deadline (pass/fail or Audit)	November 05
Last Day to Withdraw from a class	November 05
Thanksgiving Vacation	November 27-28
Pre-Registration for Spring 2014	December 01-05
Last Day of Classes	December 05
Finals Begin	December 06
End of Finals	December 12
End of Semester	December 12

#### 2014 Spring Semester

December 1
January 13
January 13
January 16
January 21
January 29
January 31
January 31
March 5
March 17-21
April 2
April 2
April 7-11
April 18
April 21-April 25
May 2
May 3
May 9
May 9
May 10

#### 2014 Field Camp

May 17-June 29 Geology Field Camp

#### 2014 Summer Session

Deadline for Intent to Graduate	June 1
Validation Day	June 9
Classes Begin	June 9
Non-validated Student Disenroll	June 11
Late Registration Fees Begin (\$30/day)	June 12
Last day to add/drop a class	June 17
Registration Closes	June 17
Academic Holiday	July 4
Grade Option Deadline (pass/fail or Audit)	July 16
Last day to Withdraw from a class	July 16
End of Semester	August 1

### **Degrees Offered at Tech**

#### **Associate Degrees**

Associate of General Studies Associate of Science in Business

#### **Bachelor of Science**

**Basic Sciences** 

Biology

Chemical Engineering

Chemistry

Civil Engineering

Computer Science

Earth Science

**Electrical Engineering** 

**Environmental Engineering** 

**Environmental Science** 

Information Technology

Management

Management of Technology

**Materials Engineering** 

Mathematics

Mechanical Engineering

Mineral Engineering

Petroleum and Natural

Gas Engineering

Physics

Psychology

**Technical Communication** 

#### Bachelor of General Studies

#### **Graduate Certificate**

**Electrical Engineering** 

Hydrology

Scientific & Professional Communication

#### Master of Engineering Management

Master of Science for Teachers

#### **Master of Science**

Biology

Chemistry

Computer Science

**Electrical Engineering** 

**Environmental Engineering** 

Geochemistry

Geology

Geophysics

Hydrology

**Materials Engineering** 

Mathematics

Mechanical Engineering

Mineral Engineering

Petroleum Engineering

**Physics** 

#### **Doctor of Philosophy**

Chemistry

Computer Science

Earth and Environmental Science

Geochemistry

Geology

Geophysics

Hydrology

**Materials Engineering** 

Mathematics

Applied and

**Industrial Mathematics** 

Petroleum Engineering

**Physics** 

Astrophysics

Atmospheric Physics

Instrumentation

Mathematical Physics

#### **Undergraduate Minors**

Aerospace Engineering

Biology

**Biomedical Engineering** 

Chemistry

Chemical Engineering

Civil Engineering

Earth Science

**Electrical Engineering** 

**Environmental Engineering** 

**Explosives Engineering** 

Hispanic Studies

History

Literature

Management

Materials Engineering

Mathematics

Mechanical Engineering

Mineral Engineering

Optical Science and Engineering

Petroleum Engineering

Philosophy

Physics

Polymer Science

Psychology

**Technical Communication** 

#### **Graduate Minors**

Analysis

Applied & Industrial Mathematics

Numerical Analysis

Operations Research & Statistics

**Physics** 

### Other Principal Areas of Instruction

(no degree offered)

Aerospace Studies (AFROTC)

Art History

Education

English

Fine Arts

History

Languages

Music

Philosophy

Physical Recreation

Political Science

### **Equal Opportunity Policy**

The New Mexico Institute of Mining and Technology is committed to the policy that all persons shall have access to its programs, facilities, and employment without regard to race, age, religion, color, national origin, ancestry, sex, sexual orientation, physical or mental handicap or serious medical condition, spousal affiliation, or gender identity, as required by the New Mexico Human Rights Act, Title VI and Title VII of the 1964 Civil Rights Act as amended, Civil Rights Act of 1866, Executive Order 11246, Section 503 and 504 of the Rehabilitation Act of 1973, The Americans with Disabilities Act, The Age in Employment Discrimination Act of 1990, Vietnam Era Veterans Readjustment Assistance

#### Other Formats

The New Mexico Tech 2013-2014 catalog is available online at: www.nmt.edu

The catalog is also available in other formats upon request. Contact:

The Office of Admission New Mexico Tech 801 Leroy Place Socorro, NM 87801 575.835.5424 or 1.800.428.TECH.

#### **Proviso**

The provisions of this catalog are not to be regarded as an irrevocable contract between the student and New Mexico Institute of Mining and Technology. New Mexico Tech reserves the right to change any provisions or requirements at any time within the student's term of residence.

# Terms and Abbreviations You Should Know

#### **Academic Terms**

#### **Academic Load**

The academic year at Tech consists of two semesters. A class hour is 50 minutes in length; ordinarily, a laboratory period is about three times as long. One class hour or laboratory period a week through a semester gives one credit hour.

Full-time graduate students must carry a load of at least 9 credits each fall and spring semester. Graduate students on assistantships must carry at least 12 credits. Physics Recreation (PR), Fine Arts (FA), and Community Education courses (designated by the letter "C" in the course number) do not count toward the minimum credit hours for graduate students. Graduate loads normally only count courses numbered 300 and above.

The Veterans Administration requires students on the GI Bill to carry a minimum of 12 credit hours (6 credit hours in summer) to qualify for full benefits. Physical Recreation (PR), Fine Arts (FA), and Community Education courses (designated by the letter "C" in the course number) do not count toward the minimum credit hours for veterans. Complete information can be obtained in the Veterans Affairs Office.

#### **Auditing a Class**

If you wish to participate in a course to learn about the subject but not be required to earn a letter grade, you can audit the course. You will receive a grade of satisfactory audit (SA) or unsatisfactory audit (UA) as determined by the instructor, but no credit. Graduate students who earn unsatisfactory audits are not making satisfactory academic progress. Payment is the same as for a credit class. Professors will expect you to attend class and to be prepared to participate in the course. Graduate students may only audit at most one three-credit course per semester.

#### **Challenge Exams**

If you think you already know the material in a course you are required to take, ask the department chair for a challenge exam. For a small fee, you will be tested on the course material. Depending on the department, you may receive a letter grade or an

"S" (for Satisfactory), or they may simply waive the course. Or, of course, you may be told you have to take the course anyway.

#### **Course Numbers**

Courses numbered from 100 to 199 are intended primarily for first-year students (freshmen); 200 to 299 for second-year students (sophomores); 300 to 399 for third-year students (juniors); 400 to 499 for fourth-year students (seniors); and 500 to 599 for graduate students. Exceptions may be made with the approval of the major advisor and instructor. Graduate students may be allowed credit for courses numbered 300 and above.

#### **Credit Hours**

Credit hours are measured in class hours (cl hrs), lab hours (lab hrs), and recitation/discussion hours (recitation hrs).

"1 cl hr" and "1 recitation hr" correspond roughly to one hour spent in class each week and is equivalent to one (1) credit hour. "3 lab hrs" equals about three hours per week in the laboratory and is also equivalent to one (1) credit hour.

In addition to class and lab time, you can expect to spend approximately three hours of study and preparation for each credit hour of class.

#### **Directed Study**

Graduate directed study courses are usually self-paced 500-level classes. Typically, a directed study is research-oriented and allows you to work and progress in a relatively unstructured situation. To sign up, you will need the instructor's permission, the approval of the department chair, and a special form from the Office of the Registrar.

#### **Electives**

Electives are courses taken in addition to the specific courses required by your major. Electives bring your credit hours up to the required number for graduation. Some majors allow students to choose many electives; others, few. Please refer to the specific degree requirements for your major. All graduate electives must be 300-level or above.

#### **Grade Point Average (GPA)**

Your semester GPA is found by multiplying the number of credit hours for each course with a number corresponding to your grade in the course and then dividing by the total number of credit hours in the semester. A=4, B=3, C=2, D=1, F=0. For example, a student taking two three-hour courses who received an A and a B would have a GPA for that semester of 3.5.

$$([(3 \times 4.0) + (3 \times 3.0)]/[3 + 3] = 21.0/6 = 3.5)$$

See page 51 for a complete list of possible grades and their grade points.

Courses taken for grades of S, U, SA, and UA are not calculated in your GPA.

Your cumulative graduate GPA is an average over your entire graduate career at NMT. Transfer credits are not included in your cumulative GPA.

#### Major

Your major is your primary field of study. The number of credit hours required in your major varies by program.

#### **Minor**

New Mexico Tech awards graduate minors for a limited number of secondary fields of study. (See page 5 for a list of minors.) The number of credits required for a graduate minor vary from program to program, with a minimum of 12 credit hours required.

You must declare a graduate minor and be assigned a minor advisor prior to completing the coursework for the graduate minor.

#### **Prerequisites and Corequisites**

Some courses have prerequisites, courses you must successfully complete before enrolling in that course. Exceptions may be made with approval of the instructor and advisor. If you enroll in a course in which you do not have the prerequisites without the proper approval, you may be disenrolled.

Corequisites are courses taken during the same semester.

Prerequisites and corequisites are not determined by the student's individual catalog, but rather by the catalog in effect at the time that the course is offered.

#### Satisfactory Academic Progress for Financial Aid

To be in good standing for financial aid purposes, a graduate student must earn at least 67 percent of the hours attempted with a cumulative G.P.A. of 3.0. See page 41 for more information on satisfactory academic progress for financial aid.

#### Validation

Validation is acceptance of your financial responsibilities to New Mexico Tech for all courses you are registered for. You must validate with the New Mexico Tech Business Office before your registration process can be considered complete. Students who are not validated by the Wednesday before the drop deadline are subject to disenrollment from classes. Graduate students with assistantship contracts may qualify for a Graduate Deferred Payment (GDP) plan, which is arranged with the Student Accounts Office.

#### **Course Abbreviations**

AE Aerospace Engineering

ACCT Accounting
ANTH Anthropology
ART Art History
AFAS Air Force ROTC

BA Business Administration BCS Business Computer Systems

BIOL Biology

CE Civil Engineering
CED Community Education
CERT CED Certificate Program
CH E Chemical Engineering

CHEM Chemistry
COMM Communication

CSE Computer Science Engineering

ECON Economics
EDUC Education

EE Electrical Engineering
EMGT Engineering Management

ENGL English

ENVE Environmental Engineering ENVS Environmental Science

ERTH Earth Science

ES Engineering Science

FΑ Fine Arts FIN Finance French **FREN GEOC** Geochemistry **GEOL** Geology **GEOP** Geophysics **GERM** German History HIST HUMA Humanities HW Health & Wellness HYD Hydrology

IT Information Technology

LIFE Lifestyle

MATE Materials Engineering
MENG Mechanical Engineering

MATH Mathematics

METE Mineral Engineering
METE Metallurgical Engineering

MGT Management
MKT Marketing
MUS Music
OPT Optics

PETR Petroleum Engineering

PHIL Philosophy PHYS Physics

PR Physical Recreation
PS Political Science
PSY Psychology
SPAN Spanish
SS Social Science
ST Science Teaching

TC Technical Communication
WGS Women's and Gender Studies

### Other Abbreviations, Acronyms, and Terms Used at Tech

l	nd Term	s Used at Tech
	AOC	Array Operations Center
	CED	Community Education Department
	CEMED	Center for Energetic Materials and
		Devices
	DE	Distance Education
	E&ES	Department of Earth and
		Environmental Science
	EEG	Environmental Evaluation Group
	ECO	Etscorn Campus Observatory
	EMRTC	Energetic Materials Research and
		Testing Center
	EODI	Educational Outreach and Distance
		Instruction
	FacMgmt	Facilities Management
	FE exam	Fundamentals of Engineering exam
	GOLD	Group Opportunities for Learning and
		Development
	GPA	Grade Point Average
	ICASA	Institute for Complex Additive Systems
		Analysis
	IERA	Institute for Engineering Research and
		Applications
	ILEA	International Law Enforcement
		Academy
	IRIS	Incorporated Research Institutions for
		Seismology
	ISD	Information Services Department
	ITV	Instructional Television
	LIBROS	Tech Library's On-Line Catalog
	MEVO	Mount Erebus Volcano Observatory
	MRO	Magdalena Ridge Observatory
	MROI	Magdalena Ridge Observatory
		Interferometer
	MSEC	Mineral Science and Engineering
		Complex
	NCKRI	National Cave and Karst Research
		Institute
	NMBGMR	New Mexico Bureau of Geology and
		Mineral Resources (often referred to as
		"the Bureau")
	NMCCNS	New Mexico Common Course
		Numbering System
	NRAO	National Radio Astronomy
		Observatory
	OCLC	Library Database
	OIEP	Office of International and Exchange
		Programs

**Optical Surfacing Technology** 

OST

PAS Performing Arts Series PASSCAL IRIS's Program for Array Seismic Studies of the Continental Lithosphere PRRC Petroleum Recovery Research Center R&ED Research and Economic Development Office RA Resident Assistant **RCN** Residential Computing Network ROTC Reserve Officer Training Corps SA Student Association SAC **Student Activities Center SAIC** Science Application International Corporation SUR Student and University Relations Office TA Teaching Assistant TAC Tech Authorization Code (for long-distance telephone access) TCC Tech Computer Center UC User Consultant (at the TCC) VLA Very Large Array radio telescope VLBA Very Long Baseline Array radio telescope VSQ Visiting Scientists' Quarters WIPP Waste Isolation Pilot Project

# The University An Overview of New Mexico Tech

New Mexico Institute of Mining and Technology, commonly known as New Mexico Tech, is devoted to excellence in education and research. The atmosphere is casual, and each student can expect to be recognized as a distinct individual.

New Mexico Tech students may choose from programs in the earth sciences, physical and biological sciences, engineering disciplines, technical communication, mathematics, management, computer science, and information technology. In addition, breadth and enrichment are provided by supporting programs in the arts, humanities, and social sciences. The New Mexico Tech student gains a liberal education, as well as a thorough science, mathematics, and engineering education.

At New Mexico Tech there is no artificial distinction between pure and applied research and no sharp dividing line between teaching and research. The New Mexico Tech student is challenged to learn, to think in the abstract, and to bring abstractions to bear on practical situations. Employment of students in the many research facilities and in departmental research is central to New Mexico Tech's programs.

Undergraduate students can choose from among 21 Bachelor of Science programs or pursue a degree in general studies (Associate of General Studies and Bachelor of General Studies), an interdisciplinary degree that allows students to create a unique educational portfolio structured to specific interests and career goals. Graduate programs extend through the doctoral level and contribute to the research atmosphere that also benefits undergraduate instruction. Many graduating seniors continue their studies in graduate or professional schools.

With an enrollment of approximately 2,000 undergraduate students and 500 graduate students, New Mexico Tech offers the advantages of small classes—the average class size is 14 students for lectures and only 12 students in lab sessions. (Introductory classes are usually larger.)

Although New Mexico Tech does not offer athletic scholarships or participate in major spectator sports, students participate in a rich variety of intramural, club, and individual sports activities. Student organizations cater to professional, hobby, religious, and social interests.

#### The Campus

New Mexico Tech's beautifully landscaped campus is an oasis of green in the desert, with tall trees, grassy lawns, and flowerbeds. The central section of 320 acres contains academic buildings, laboratories, residence halls, family housing, and recreational areas. An additional 40 square-mile area adjoining the main campus is used for research and testing activities. Socorro Peak, with an elevation of 2,208 m (7,243 ft) above sea level, is immediately west of the campus quadrangle and contains a mine now used for seismic studies. Recreational areas on campus include the Joseph A. Fidel Student Services Center, Student Activities Center (SAC), Swim Center, tennis courts, Macey Theater/Conference Center, the Etscorn Campus Observatory, the Gymnasium, and an 18-hole Golf Course.

#### A Brief History of New Mexico Tech

What began over a century ago as a mining school has evolved into an important research and educational institution. New Mexico Tech was founded as the New Mexico School of Mines in 1889, when it was established by an act of the Territorial Legislature. Over the years, Tech's emphasis has expanded, first into the area of petroleum engineering, and then, in the 1940s, into physics research. Today, New Mexico Tech is known for its expertise in highly specialized areas such as earth and atmospheric sciences, astrophysics, testing of energetic materials, and such engineering fields as chemical, civil, electrical, materials, mechanical, environmental, petroleum, and mineral engineering.

In addition to the educational arm of the Institute, New Mexico Tech has numerous research and service entities, including the New Mexico Bureau of Geology and Mineral Resources, the Research and Economic Development Division, the Petroleum Recovery Research Center, the Energetic Materials Research and Testing Center, Optical Surfacing Technologies, Langmuir Laboratory for Atmospheric Research, the Institute for Complex Additive Systems Analysis, and Incorporated Research Institutions for Seismology.

In recognition of the growing role of the Institute, the State Legislature changed the name in 1951 from "New Mexico School of Mines" to "New Mexico Institute of Mining and Technology," which is still the official name. The name "New Mexico Tech" came into common use in the 1960s.

The graduate program was begun in 1946 and involves staff and facilities of the entire Institute.

#### **Our Mission**

New Mexico Tech is an institute of higher learning that serves the diverse population of New Mexico by integrating education, research, public service, and economic development through emphasis on science, technology, engineering, mathematics, natural resources, communication, and cultural awareness. Our mission is to:

- 1. help students learn creative approaches to addressing complex issues;
- 2. acknowledge state, national, and global diversity by developing an inclusive learning environment;
- 3. create and communicate knowledge;
- 4. solve technical and scientific problems.

#### **Institute-Wide Student Learning Outcomes:**

New Mexico Tech bases its curricula and its cocurricular activities on the following student learning outcomes; we continuously assess the level of achievement our students demonstrate in these outcomes. NMT students will:

- 1. learn to reason well and to evaluate and apply information;
- 2. develop analytical and quantitative skills for competence in science and math;
- communicate to different audiences in multiple forms;
- 4. exercise their role as members of diverse societies and cultures;
- learn responsible values and ethics for their professional lives;
- 6. gain expertise in their chosen field of study.

#### **Institutional Values**

New Mexico Tech is a community of people who are guided by certain values as they perform their professional tasks and develop initiatives. More than operating procedures as they are fundamental to our endeavors, our institutional values are:

Creativity, excellence, integrity, collegiality and citizenship, service, leadership, and commitment to economic prosperity and technological development.

#### Creativity

Creativity is integral in virtually all endeavors. It calls for curiosity, adaptability, resourcefulness, and requires imagination, vision, and diligence. Whether the task being performed is by a NMT carpenter, secretary, graduate student, or regent, our institution encourages, and expects, creativity. Creativity is

demonstrated by faculty, staff, and administrators in our various student learning initiatives.

#### Excellence

Excellence speaks for itself. New Mexico Tech is known for the high quality of its education and research but we aspire to an apex of excellence in which the whole is greater than the sum of its parts. At this level, excellence is rewarded at New Mexico Tech.

#### Integrity

Integrity is honored as a fundamental value at New Mexico Tech. Dishonesty cheating, and plagiarism have no place in a respected institution of higher education. But real integrity goes further than these negatives; integrity means having the courage to defend the truth, to act fairly and honestly in all our endeavors, and to be responsible members of the community.

#### Collegiality and Citizenship

New Mexico Tech is a place where people care about each other and demonstrate social responsibility. That sense of caring and responsibility we call collegiality and citizenship. Demonstrating collegiality and citizenship means being open with others, sharing with them, and collaborating with them for the good of the Institution. Practicing collegiality and citizenship also means mentoring: acting as a guide and advisor to a colleague, a student, an associate, a coworker.

Collegiality and citizenship includes caring about and contributing to the community—the campus community, the community of Socorro, the larger community of the State of New Mexico, and the global community. Collegiality and citizenship means valuing the diversity of race, gender, ethnicity, and nationality that creates our community.

#### Service

As a community of learners, New Mexico Tech also acknowledges a responsibility to serving society, especially since learning helps meet not only individual needs, but also those of the larger community. Service is a source of motivation and inspiration to those who practice it, reflecting both a capacity for relating to others, as well as deep-level concern for the quality of human life. The social benefits of service are further fulfilled through the expansion of knowledge by teaching, scientific investigation, technology transfer, economic development, and outreach programs.

#### Leadership

New Mexico Tech has been, is, and will continue to be at the forefront of science, technology, engineering, mathematics, and communication research, design, and education. Creating an open environment that also develops and fosters tomorrow's leaders is of paramount importance. Leadership involves motivational methods that influence others to share a vision of our university's mission and outcomes – toward a common understanding of where New Mexico Tech is now and where it is heading and toward an increased commitment to a continuous achievement of those visionary ends. By inspiring, engaging, enabling, and empowering others throughout the university, members at all levels and in the variety of disciplines, areas, and programs can take on leadership roles. Strong, effective leadership is best exemplified not through methods of control, but through positive influence.

### • Commitment to Economic Prosperity and Technological Development

New Mexico Tech promotes regional and state economic prosperity and technology development through its academic and resources. In addition to preparing the workforce of tomorrow through academic rigor and practical research experience, the university provides strategic support, technical assistance, technology transfer, and development and implementation of bold new research initiatives, enabling technologies and training programs to bolster both public and private sector success and competitiveness. Furthermore, New Mexico Tech is committed to integrating diversity into all facets of its work since the intrinsic value of understanding and respecting similarities and differences among all groups is central to fully achieving the university's comprehensive academic, research, and outreach goals and objectives.

#### **Accreditation**

New Mexico Tech is accredited by the North Central Association of Colleges and Secondary Schools as a doctoral degreegranting university. Its credits are accepted by



Alteration and/or unauthorized use prohibited.

leading colleges and universities throughout the United States. It is approved by the Attorney General of the United States for the attendance of non-immigrant students, by the United States Department for Exchange Visitor Program P-I-1282, and by the Veteran's Approval Division of the Office of Military Affairs for attendance by students entitled to veteran's benefits.

#### **HLC Contact Information:**

New Mexico Tech is accredited by <u>The Higher</u> <u>Learning Commission</u>, which is part of the North Central Association of Colleges and Schools. http://www.ncacihe.org/ (312) 263-0456.

#### NMT Contact Information:

New Mexico Tech 801 Leroy Place Socorro NM 87801 575-835-5434

The chemistry curriculum is approved by the Committee on Professional Training of the American Chemical Society.

The bachelor's programs in chemical engineering, civil engineering, electrical engineering, mechanical engineering, environmental engineering, materials engineering, mineral engineering and petroleum engineering are accredited by the Engineering Accreditation Commission of ABET, http://www.abet.org.

The 'Bachelor of Science in Computer Science' program is accredited by the Computing Accreditation Commission (CAC) of ABET, http://www.abet.org.

New Mexico Tech is also a member of the American Society for Engineering Education.

The Graduate School is a member of the Council for Graduate Schools in the United States.

### Research and Service Organizations at New Mexico Tech

New Mexico Tech has a number of organizations whose missions involve research and/or public service. Many of these organizations employ students at the graduate and undergraduate levels, providing students not only with employment but also with educational work experiences that enhance their value to future employers.

# Center for Energetic Materials and Devices (CEMED)

The Center for Energetic Materials and Devices (CEMED) is a research organization that develops applications for energetic materials and energetic devices. It consists of New Mexico Tech, Sandia National Laboratories, and Los Alamos National Laboratory in a consortium that is administered by New Mexico Tech. The facilities of the CEMED partners are world-class and CEMED's development capabilities include more than 200 professional staff, state-of-the-art laboratories, thousands of acres of field test ranges and access to the most advanced computational equipment available.

The prime advantage to CEMED's customers is the single entity working on the customer's research problem with the facilities and skills of three research organizations. CEMED provides cost effective design, development, and testing of energetic devices for commercial, civilian and military applications. CEMED also provides educational opportunities for undergraduate students, graduate students and post doctoral researchers. These students are the future workforce for research and development of energetic materials and devices both in New Mexico and around the country.

# **Energetic Materials Research and Testing Center (EMRTC)**

(www.emrtc.nmt.edu)

In existence for more than 50 years, the Energetic Materials Research and Testing Center (EMRTC) is the largest of the research divisions at New Mexico Tech.

EMRTC conducts research on the performance and safety of energetic materials and explosives for the U.S. Government, friendly foreign governments, and academic and commercial entities at its 40-square mile field test laboratory. This complex includes more

than 30 separate test sites, gun ranges, and state-of-the-art research laboratories. EMRTC also develops tools to analyze material interactions by using computer codes designed to simulate detonation, fragmentation, and impact.

To support the educational and research processes of New Mexico Tech, EMRTC provides joint appointments for faculty and staff and opportunities for graduate and undergraduate student employment.

EMRTC hires up to 30 undergraduate and graduate students each semester and through the summer months. The opportunities provided include construction, design, analysis, test setup, instrumentation and data collection, film analysis, report preparation, and other valuable work experiences for the real world. Many of EMRTC's student workers have been able to get jobs (some at EMRTC) based on the experience they gained while working at EMRTC.

EMRTC also develops and conducts a program of training courses for federal, state, tribal, and allied government agencies; academic institutions; and commercial entities in the following areas:

• National Domestic Preparedness — EMRTC is a member of the National Domestic Preparedness Consortium (NDPC), a partnership of public and private organizations whose goal is to provide a focused, threat-responsive, long-term national capability to execute and sustain a comprehensive and coordinated domestic emergency responder education, training, testing and exercise program.

EMRTC conducts this training for state, county, and city officials who are responsible for responding to terrorist incidents. Trainees actively engage in scenario-based activities designed to provide practice in the skills they will use on the job. First responders and other participants from every state in the nation have been trained at EMRTC.

• Anti-Terrorist Research and Training — EMRTC's anti-terrorist activities include research and test programs conducted to develop means for reducing injury and for mitigating damage caused by terrorist bombings and other incidents.

In addition, EMRTC conducts several antiterrorist training programs under a grant from the Department of State for students from allied foreign governments. New Mexico law enforcement personnel have also attended these courses.

• Explosives Safety — EMRTC conducts research and training programs in explosives and energetic materials safety. Research includes investigations of materials handling, storage, and transportation. Training includes acquainting personnel who operate

government and commercial firing sites and laboratories involved in the research, development, testing, and evaluation of energetic materials with safety requirements and techniques.

As a result of its diversified business areas, wideranging research and test activities, and ever expanding training programs, EMRTC synergistically complements New Mexico Tech's educational and research responsibilities, enhances employment opportunities, and significantly contributes to the economic development of New Mexico.

### Institute for Complex Additive Systems Analysis (ICASA)

(www.icasa.nmt.edu)

The Institute for Complex Additive Systems Analysis (ICASA) is a cooperative alliance among academia, industry, and government that New Mexico Tech administers under contract with the Department of Defense along with the support of the state of New Mexico. This alliance is dedicated to studying the behavior, vulnerabilities, and predictability of complex systems through ICASA's unique approach, known as the Complex Additive Systems Analysis (CASA) process. This process gathers information-age research and applies this research to real-world problems.

ICASA's basic research focus is to understand the additive effects—or unintended consequences—of efficient design in interdependent systems of systems. Research is pursued through four strategic thrusts: carrying out basic research on complex additive systems; applying research to real-world problems in the private and public sectors; developing key enabling technologies to assist in applying research results; and establishing training and education programs to meet customer's unique needs. ICASA's research is characterized by the study of dynamical systems, control theory, mathematical physics, and economics using the tools of theoretical analysis, modeling, and simulation.

ICASA's Electrical Power (EP) team works to understand and model cascading power failures. The EP team uses the CASA process, mathematical modeling, computer simulation and visualization, hardware implementation, and control of dynamical systems to analyze power grids. Currently, they are working on a multimillion dollar training and decision support system that will allow power operators to react more effectively to power grid failures.

The primary function and goal of ICASA is to assist and encourage the implementation of formal degree programs at New Mexico Tech. These programs integrate components of the computer science, engineering, and management departments. The first integrated program was Information Technology (IT), which is jointly managed by the computer science and management departments. The IT program has since flourished from a small venture into a full-fledge accomplished program by being the only IT program offered in the state of New Mexico. It was also named as a Center of Excellence in Information Assurance by the National Security Agency (NSA) in 2002. Only 50 universities in the nation have been awarded this designation. ICASA will continue to assist and support more degree programs, which may include the combining of computer science and engineering as well as other disciplines.

ICASA offers New Mexico Tech undergraduate and graduate students, and on occasion, commendable high school seniors throughout the state, opportunities to research real-world problems. Students in their freshman or sophomore years may apply for a Student Research Initiative (SRI), a program that introduces the basic principle of complex additive systems and the CASA process. Project topics include electrical power, financial networks, research organizations, and epidemics. Students also learn about the development and presentation of scientific research while working with a mentor.

SRI is part of ICASA's career path program designed to take a student from basic research projects during their freshman and sophomore years to student internships for their junior and senior years. Eventually, opportunities may be offered for graduate assistantships and a professional appointment with ICASA or their partner organizations. As ICASA continues to grow and embrace new disciplines, New Mexico Tech students are offered additional educational and research opportunities through the institute.

# IRIS PASSCAL Instrument Center and EarthScope USArray Array Operations Facility

(www.passcal.nmt.edu)

The Incorporated Research Institutions for Seismology (IRIS; www.iris.edu) Consortium's Program for Array Seismic Studies of the Continental Lithosphere (PASSCAL) Instrument Center is located in New Mexico Tech's Research Park. The Center is primarily supported by the National Science Foundation (NSF) and U.S. Department of Energy, and is operated by Tech professional staff in coordination with the Department of Earth & Environmental Science

Geophysics Program and the Geophysical Research Center. In association with researchers and students from around the world, Instrument Center staff engage in hardware/software development and training associated with earthquake, volcano, glaciological, and other seismological research, handle logistical support and fieldwork for Earth science experiments, and maintain the world's largest academic pool of research seismological instrumentation. PASSCAL instruments are routinely employed in teaching and research projects with investigators from Tech's Geophysics Program, as well as many other U.S. and international research institutions. A key component of the Instrument Center's operations is to provide unique opportunities for New Mexico Tech and other students to learn about and contribute to the international seismological research community through employment, internships, and other opportunities.

The Instrument Center also hosts the Array Operations Facility for the seismological USArray component of EarthScope (*www.earthscope.org*), an NSF Earth Science research project of unprecedented scope studying the geology and geophysics of the North American continent and the deep Earth.

#### Langmuir Laboratory for Atmospheric Research

(www.ee.nmt.edu/~langmuir)

Langmuir Laboratory, built by New Mexico Tech in 1963, is located at an elevation of 3,240 m (10,630 ft) in the Magdalena Mountains, 27 km (17 air miles) southwest of the main campus. The laboratory was named in honor of Dr. Irving Langmuir, Nobel Prize winner, who participated in numerous experiments at Tech related to cloud physics after the discovery of cloud seeding in 1946. Because of its location and unusual climatic situation, the site provides unique opportunities for studies of thundercloud mechanisms, lightning, and precipitation. Overnight living accommodations are available for faculty and students working at the laboratory.

The Langmuir Research Site consists of 33,000 acres of Cibola National Forest which surrounds Langmuir Laboratory. Public Law 96-550, passed by Congress in 1980, preserves the land in its undeveloped state and encourages scientific research as a prime land use in this national forest. Restricted Airspace R-5113 supports flights of instrumented airplanes, rockets, and balloons. The laboratory is operated under a special use permit issued by the U.S. Forest Service.

# Magdalena Ridge Observatory (MRO)

(www.mro.nmt.edu)

The Magdalena Ridge Observatory's 2.4-meter telescope is now operational. It is optimized for observations of Solar System objects.

The Magdalena Ridge Observatory Interferometer (MROI) is currently in construction and development stages, and will be a world-class, state-of-the art astronomical research facility. At an elevation of almost 10,400 feet in the Magdalena Mountains of the Cibola National Forest, and just a one-hour drive from campus, the MRO will be the fourth highest observatory in the world.

Using interferometry, the same technique used at the Very Large Array (VLA) radio telescope to link 27 separate radio receivers to form one gigantic instrument, the MRO interferometer will link ten large optical and infrared telescopes to provide the resolving power of a single 400-meter telescope. This instrument will have better optical resolution than the Hubble Space Telescope by a factor of 300.

#### Mount Erebus Volcano Observatory (MEVO), Antarctica (erebus.nmt.edu)

The Department of Earth and Environmental Science operates a year-round network of scientific instrumentation (seismic, infrasonic, geodetic, and environmental) on the active Mount Erebus volcano in Antarctica for fundamental research in volcanology under support from the National Science Foundation, Office of Polar Programs. Each year, Austral summer observations and surveillance are made by New Mexico Tech students and faculty from a field camp situated 3400 meters high on the volcano. Mt. Erebus, the world's southernmost active volcano, features a unique lava lake in its summit crater and has frequent eruptions. Data is telemetered to the Crary Science Lab at McMurdo Station, Antarctica, and then transferred via the Internet to Tech for year-round analysis and archiving in near real time.

### National Cave and Karst Research Institute (NCKRI)

(http://www.nckri.org)

The National Cave and Karst Research Institute (NCKRI) facilitates and conducts programs in research education, data management, and stewardship in all fields of speleology. NCKRI promotes and performs projects of national and international application through dedicated staff and partners. NCKRI is partners

with NMT's Earth and Environmental Science
Department at New Mexico Tech and supports cave
and/or karst related research projects such as the
development of kart terrains in evaporate minerals,
modeling the micrometeorology of caves, sulfuric acid
speleogenesis, and the unique geomicrobiology of cave
deposits and in sulfuric cave environments.

Karst landscapes and their associated features like caves, springs, underground rivers, and sinkholes are fascinating, but often not well-understood by students and professionals in earth and natural sciences. Karst landscapes are prevalent on 20-25% of the land worldwide. Karst is a fragile landscape with vulnerable aquifer systems. Though over 40 million US residents depend on karst aquifers for drinking water, few have ever heard the word. This fact, along with significant scientific discoveries in caves, led to the foundation of NCKRI in 1998 by the US Congress in partnership with the state of New Mexico and the City of Carlsbad. New Mexico Tech is responsible for the planning, coordination, and administration of the Institute and its programs.

NCKRI's projects and interests range quite literally from the inner space to outer space. Karst springs and aquifers can produce tremendous volumes of water, yet they are incredibly complex and the most vulnerable to contamination. Sinkholes in karst result in millions of dollars in damages each year, and occasionally the loss of lives. NCKRI scientists are looking at cave microbes for industrial and medical applications, and are working with NASA to better understand where life might be found on other planets.

NCKRI Headquarters is located in Carlsbad, New Mexico. The building and operating practices are a testament for living softly on karst. It was constructed utilizing environmentally friendly products and it includes many "green" features such as an artificial bat roost that allows for scientific study of these highly beneficial mammals. NCKRI is currently developing a suite of exhibits to engage audiences to take a learning voyage centered on cave and karst systems. To learn more about NCKRI, visit our website at www.nckri.org or find us on Facebook.

# National Radio Astronomy Observatory (NRAO)

(www.nrao.edu)

NRAO is not a division of New Mexico Tech (it is funded by the National Science Foundation), but its office on the New Mexico Tech campus operates two major radio telescopes: the Very Large Array (VLA) and Very Long Baseline Array (VLBA).

#### New Mexico Bureau of Geology and Mineral Resources (NMBGMR) (www.geoinfo.nmt.edu)

The New Mexico Bureau of Geology and Mineral Resources is the official state agency responsible by law for original investigations of geology and mineral and water resources in New Mexico. The Bureau investigates, evaluates, and disseminates information on geology, mineral, water, and energy resources, and extractive metallurgy—with emphasis on aiding the discovery and responsible development of nonrenewable resources for the benefit and well-being of the citizens of this state. The director of the Bureau also serves as State Geologist.

Although primarily a technical organization providing counsel to state and federal agencies, as well as extractive industries, the Bureau also serves all interested citizens by advancing the understanding of the state's geology and natural resources. Environmental geology and geohydrology are increasingly important parts of the Bureau's service and applied research.

The Bureau's **Mineral Museum** represents one of the most outstanding mineral collections in the United States. The collections contain more than 16,000 mineral, rock, mineral product, mining artifact, and fossil specimens. Specific displays highlight minerals from the New Mexican mining districts and the southwestern United States, as well as fluorescent minerals. Other significant specimens from around the world are also displayed. In addition to display specimens, a reference collection of New Mexico rocks, ores, and minerals is available for research. A museum demonstration facility allows for hands-on explorations into earth science phenomena as well as illustrating the importance of mineral products in modern society.

The New Mexico Library of Subsurface Data contains more than 6.5 million individual cuttings samples from 16,300 different oil, gas, and water wells drilled in the state. The samples, taken from different levels to show various strata, are valued at more than \$1 million. Collected for more than 50 years, the cuttings samples also represent tests for uranium, coal, and other minerals. The library also contains well logs from approximately 49,000 wells and driller's logs from more than 15,000 wells. A core library contains selected cores from petroleum and mining drill holes throughout New Mexico. All are available for study. Basic information on 100,000 wells in the state is also available.

The information assembled by the Bureau staff of scientists is provided to the public through maps, publications, and direct response to individual inquiries. Publications are distributed throughout the world on an exchange agreement with other geological surveys. Exchange publications are kept for reference in the Tech library. By furnishing vital scientific information and advice, the Bureau aids in the establishment of new mining and petroleum operations and new energy and mineral industries in the state, as well as in the expansion and diversification of existing resource industries and the state's water supplies.

The extensive laboratories of the Bureau are designed and equipped for analysis and experimentation in a wide variety of areas useful to the geosciences. These facilities are used not only in the Bureau programs, but also are available for use in instructional programs by students majoring in geology and metallurgy, and in materials, mineral, and petroleum and natural gas engineering. A substantial number of graduate and undergraduate students are employed by the Bureau. Students work on research projects and in laboratories and offices. In addition, many of the staff also teach classes and advise on student projects.

#### **New Mexico Bureau of Mine Safety**

The Bureau of Mine Safety (BMS) exists to actively promote the safety of the miners of New Mexico. BMS trains thousands of miners each year, including miners trained in Spanish language classes. BMS training and initiatives have contributed to a superb safety record in New Mexico.

Directed by the State Mine Inspector, the department is a state and federally funded organization providing services to New Mexico and its miners in the following areas:

**Mine Rescue and Emergency Response** - Coordination of incident response,

equipment and human resources

- Legislative Issues Relative to Miner Safety -Includes being the point of contact for the Governor's office on mine related issues and legislation
- Mine Compliance Assessment and Courtesy
  Inspections Communicating the
  legislated mining safety standards and
  ensuring adherence
- Safety and Health Training Providing safety and health training to mine workers, contractors, as well as federal and state organizations involved in special mine-

related activities

Certification of Coal Mine Officials - Developing and providing an examination process designed to certify qualified coal mine officials

#### Safety Award, Other Education &

Communication Programs – Safe Operator of the Year, Zero [accident] Frequency Awards, Small Mine Mentoring Program, BMS website and Informational Meetings are all BMS programs designed to further awareness and actively promote the safety of New Mexico's miners

Coordination of New Mexico Mine Safety Board (MSB) – This board promulgates the rules that affect the mining industry in the State of New Mexico

# New Mexico Petroleum Recovery Research Center (PRRC)

(baervan.nmt.edu)

The Petroleum Recovery Research Center (PRRC), the only research center of its kind in New Mexico, is a world-class scientific research organization dedicated to solving problems related to the oil and gas industry. The PRRC's mission is to develop, through theoretical and practical research, improved oil recovery methods to increase oil and natural gas recovery from New Mexico's and the nation's oil and gas reservoirs and to transfer new technology to the industry and to local independents.

Interaction between the educational institution and the PRRC's research staff is extensive. New Mexico Tech offers the only petroleum and natural gas engineering degree program in the state, and students have ample opportunity to participate in ongoing front-line research at the PRRC while pursuing their academic training. The center's current research program includes studies involving the use of gels to reduce water production and increase reservoir sweep efficiency; improved carbon dioxide (CO2) flooding with emphasis on mechanisms that control injectivity; fundamental research on rock/fluid interactions and their influence on oil recovery, with emphasis on studies of wettability alteration and asphaltenes; reservoir characterization using artificial intelligence; CO<sub>2</sub> sequestration studies; and the development of membrane and sensor technologies for use in cleanup of produced water from oil and gas recovery, for hightemperature CO2 capture, and for the efficient conversion of natural gas into more valuable higher hydrocarbons and hydrogen. Current New Mexico oil

and gas production data and related information is disseminated to the public via the center's GO-TECH web site, developed in-house, which is continually expanding as a result of ongoing collaborations with various state and federal agencies and with local independents.

The PRRC employs 20 full-time research and professional personnel, provides research assistantship support to an average of 25 graduate students year round, and employs an average of 22 undergraduate students throughout the academic year. The center's daily operations are conducted at the John M. and Esther L. Kelly Petroleum Building which features general office space, 20 laboratories (approximately 20,000 square feet), specially designed storage areas, a core-cutting and welding facility, machine and woodworking shops, a reports and publications office, and a large seminar room.

# New Mexico Tech Research and Economic Development Division (www.nmt.edu/~red)

Faculty and student involvement in research is a distinguishing characteristic of New Mexico Tech. The Research and Economic Development Division (R&ED) encourages research throughout Tech in many ways. R&ED places a special emphasis on encouraging interdisciplinary and collaborative work and not only provides financial support, but also promotes research through professional and technical expertise, services, and facilities.

The main state-supported research component of R&ED is the Geophysical Research Center (GRC). The GRC supports research in atmospheric physics and chemistry, air quality, seismology, and groundwater hydrology. The Langmuir Laboratory for Atmospheric Research (part of the GRC), located in the nearby Magdalena Mountains, is an internationally recognized facility for research in lightning, cloud physics, and water chemistry. The Incorporated Research Institutions for Seismology (IRIS) is operated in coordination with the GRC and the Tech Geophysics program. The GRC also supports specialized computer facilities for data analysis, the New Mexico Tech Seismologic Observatory, numerous cloud physics radar facilities, and a Schweizer aircraft for in-situ measurements of thunderstorms. Through the GRC, a number of faculty, graduate students, and undergraduate students are supported in their research.

Additional research activities and facilities directly sponsored and supported by R&ED include an astronomical observatory in the Magdalena

Mountains and astronomical research on campus in cooperation with the National Radio Astronomy Observatory.

R&ED is Tech's central link for information about potential funding sources and program guidelines for sponsoring agencies. Other R&ED services include a machine shop equipped for specialized research projects, an instrument and supply room that focuses on the distinct needs of researchers, a corporation equipment and maintenance yard, and Tech's hazardous waste and safety office. These groups and the administrative office staff, are available to assist researchers, as well as the entire Tech community. R&ED further serves as a point of contact for economic development. R&ED contributes to New Mexico's growth in the area of technology by cooperating with industry and governmental agencies to move new ideas and discoveries from the academic laboratory into the marketplace.

#### New Mexico Tech Research/Industrial Park

New Mexico Tech's Research/Industrial Park, 600 acres located west of the main campus, is ideally suited to house industrial firms interested in the development of chemical/explosives technologies; companies seeking a site for testing and experimental procedures more appropriate to a field laboratory setting than a conventional lab; and centers for environmentally sensitive research and development. Tenants of the Research/Industrial Park can benefit from the expertise of Tech faculty and researchers as well as the various research laboratories and support services on campus.

# New Mexico Tech Seismological Observatory

(http://www.ees.nmt.edu/outside/Geop/NMTSO)

The Earth and Environmental Science Department Geophysics program operates a state-wide network of seismographs dedicated to recording and study of earthquakes and other seismological phenomena throughout New Mexico and the southwestern United States. The program also coordinates earthquake educational outreach activities in association with the Bureau of Geology through support from the New Mexico State Department of Public Safety, the United States Geological Survey, the Incorporated Research Institutions for Seismology (IRIS), the National Science Foundation, and other agencies.

#### Playas Research, Development, Test and Evaluation (RDT&E) and Training Complex

The Playas Research, Development, Test and Evaluation (RDT&E) and Training Complex, located in the "bootheel" of New Mexico, is a "real-world" training center for programs in prevention and response to suicide bombings, terrorist activities, and other related programs. Operated by New Mexico Tech's EMRTC, Playas is used for simulations of urban warfare, emergency preparedness drills, antiterrorism training, military operations training in urban terrain, hostage negotiation training, and other activities.

The U.S Department of Homeland Security (DHS) has formally committed to using Playas for training purposes during the next five years. Other federal, state, local, and tribal government departments, agencies and organizations have also expressed strong interest in the complex and its capabilities.

#### Joseph R. Skeen Library

(http://infohost.nmt.edu/~nmtlib/)

The Joseph R. Skeen Library's collection and services support the educational, research, public service, and economic development mission of New Mexico Tech. Although the library maintains a collection of over 600,000 printed books, maps, government documents, and periodicals, the vast majority of the items in the library's collection are digital and are accessible 24/7 through the library's website. The library also works to protect its users' right to privacy, supports intellectual freedom, and upholds intellectual property rights.

Housed in an attractive, three-story building with a prominent clock tower, the Skeen Library actively works to provide a safe, welcoming, and friendly environment. Food, drink, and talking are all allowed in the library, which is open 91 hours a week during the semester. The library houses a coffee shop, 6 study rooms, a presentation seminar room, a variety of flexible technology-equipped group study areas, a computer lab, a popular DVD collection, and a popular reading collection. The library provides the general public with free access to Internet connected computers and wireless Internet connections, as well as having a large number of computers dedicated only for student use.

The library also provides inter-library loan services to students and faculty members thus allowing access to the collections of 70,000 libraries worldwide. Students and faculty who wish to visit

other libraries may also request Passports to attain borrowing privileges at other university libraries in New Mexico.

The library also has a collection of archival materials relating to the history of New Mexico Tech (previously known as The New Mexico School of Mines), a map collection, a historical microform collection of Socorro newspapers, an extensive collection of historical geologic and mining materials, and the personal library of the late U.S. Representative Joseph R. Skeen.

To learn more about the library and its staff and services, please visit our website at <a href="http://infohost.nmt.edu/~nmtlib/">http://infohost.nmt.edu/~nmtlib/</a>

#### Tech Computer Center (TCC)

(www.nmt.edu/~tcc/)

The TCC is open to students, faculty, and staff while classes are in session. Students in all disciplines are encouraged to use the facility as a normal part of their course work. The center provides computer access to any regularly New Mexico Tech matriculated student who requests it, subject to TCC regulations and the New Mexico Tech Computer Usage Policy.

Each TCC user is given an e-mail address and access to the Internet, as well as an initial storage space. The TCC has a wide range of scientific software available.

TCC operates a network of Linux, Macintosh, and Windows workstations. At the time of publication, there are more than 300 workstations, all equipped with color screens, on the academic network.

In addition, there are PC labs connected to a Samba server on the campus network. There are also several computer classrooms with computers and integrated projection systems. Several labs have scanners, and all are connected to the network printing system.

The campus network is connected to the National Science Foundation Internet II nationwide computer network. The network connection gives Tech access to other New Mexico colleges, Sandia and Los Alamos national laboratories, and thousands of other sites worldwide.

In addition to the facilities found in the TCC there are many other computer systems on campus used in conjunction with departmental programs and funded research.

The TCC is an integral part of major research projects at Tech. Students and faculty who desire to use of the facilities are encouraged to contact the director of the center at 575.835.5735 or via e-mail at *tcc@nmt.edu*.

The TCC also offers free classes each semester to acquaint students with how to use the TCC and the World Wide Web.

#### **Distance Education**

(http://distance.nmt.edu)

New Mexico Tech's Distance Education Program uses the latest in Internet-based course delivery technology to offer primarily graduate-level courses in mechanical engineering, materials engineering, engineering management, environmental engineering, petroleum engineering, science teaching, and other disciplines. Distance courses are designated with a "D" following the course number in the New Mexico Tech schedule of classes. Distance education classes usually meet in one of the distance education classrooms in Cramer Hall and often include nondistance education sections. Students who are not taking a course via distance education but wish to access distance education resources, such as lecture recordings, can sign up for a "V" section, which requires a \$50 Media Resources Fee.

The Distance Education Department also maintains multimedia classrooms on campus that are set up for lecture capture. Students in these courses may, if the instructor wishes, view recordings of lectures accessible from a Web page.

The Distance Education Department also maintains multimedia classrooms on campus that are set up for lecture-capture. Students in these courses may, if the instructor wishes, view recordings of lectures accessible from a Web page.

Admission and course registration can be completed online. The Distance Education staff can assist in handling other program paperwork for students not able to come to Tech's campus.

For information on distance education courses, contact the department at 575.835.5511, toll-free at 1.866.644.4887, or <a href="http://link.new.net.edu">http://link.new.net.edu</a>.

# New Mexico Tech Community Education

(http://ced.nmt.edu)

The New Mexico Tech Community Education Department provides credit and non-credit enrichment courses in Physical Recreation, Fine Arts, Health and Wellness, Lifestyle Activities, general Community Education, and Certification programs. Courses are open to New Mexico Tech students, faculty, and staff and the surrounding community. No degrees are offered through the Community Education Department.

Community Education course prefixes may be

found on Banweb class schedules with the following prefixes:

CED (Community Education)
CERT (Certification)
FA (Fine Arts)
HW (Health and Wellness)
LIFE (Lifestyle)
PR (Physical Recreation)

Community Education classes, which are signified by a "C" following the course number, are graded on an S/U basis and can be used as elective credit in most majors. Community Education courses do not count toward full-time graduate registration. Graduate students may enroll in a limited number of Community College classes to supplement their full-time course load on approval from the Graduate Office. Full-time graduate students may enroll for 1 credit of Community Education coursework beyond their 12 hour credit limit, at no extra charge (see page 54 for restrictions).

A great deal of information may be found at the department website at <a href="http://ced.nmt.edu">http://ced.nmt.edu</a>, including downloadable catalogs with course descriptions. To speak with someone about Community Education, please visit the offices in Cramer 201 & 100 or call 575.835.6581.

#### Office for Student Learning (OSL)

The Office for Student Learning, located in the Martin Speare Building, serves both students and faculty. Working under the purview of Academic Affairs, the OSL directs and facilitates initiatives and programs for student learning. Our academic support services include the following:

#### **Academic Counseling**

Individual and group counseling is offered to help students identify their learning style and develop academic success skills such as time and stress management, study skills, and adaptive choice-making.

#### **Writing Center**

The Writing Center assists both graduate and undergraduate students with many forms of writing from essays, technical papers, to resumes and everything in between. Hours are drop-in. Services are free and are offered each regular semester.

#### **Academic Referral**

The Academic referral program is designed to identify and aid students who are having academic problems and to help them deal with those problems early in a given semester. The program serves students who are referred by faculty members, students on probation, and students who are academically under prepared for the rigorous and demanding curricula at New Mexico Tech.

### **Student Affairs**

The goal of the Student Affairs office is to help Tech students succeed in college. Offices include Career Services, Counseling Services, Multicultural Programs, and International and Exchange Programs. Staff is available to provide students with information and advice on resume writing, developing interviewing skills, and preparing for the biannual Career Fair. Students may apply to study abroad, find Co-op and internship opportunities, find ethnic related scholarships, and deal with a personal problem. Located in the Joseph A. Fidel Center, offices are open 8 a.m. to 5 p.m. daily.

#### Career Services

Career Services provides career counseling; cover letter, and interviewing skills assistance; and listings of permanent, temporary, on-campus, internship, fellowship, and research positions. Career Services is responsible for Career Fairs, the Cooperative Education program, maintaining placement records, sponsoring workshops on aspects of graduate school and job search processes, and providing assistance to employers, including scheduling information session and on-campus interviews. Although Tech assumes no responsibility for obtaining employment for its students, every effort is made to assist those who take advantage of Career Services. Information is available at www.nmt.edu/career-services.

#### **Counseling Services**

Counseling Services provides students with individual, couples/family, and group counseling, outreach programs, and consultation. We adhere to the Code of Ethics of the New Mexico Board of Social Work Examiners. All services are strictly confidential and are free to students enrolled for six or more credits hours. The office is located in the Joseph A. Fidel Center and is open from 8 a.m. to 5 p.m. weekdays. Crisis intervention is available; counseling is provided by New Mexico independently licensed clinical social worker and substance addiction therapist.

#### **Disability Services**

Disability Services arranges academic accommodations for students who have documented disabilities that affect their ability to participate on an equal basis with students who do not have disabilities. Students with sensory, mobility, learning, psychological, or other recognized disabilities are encouraged to contact this office to assist with accommodations. The office is located in the Joseph A. Fidel Center and is open from 8 a.m. to 5 p.m. weekdays. Students are encouraged to request services well in advance of the start of the semester to allow adequate time to make needed arrangements. Students must provide current documentation to be eligible for accommodations. New Mexico Tech is committed to ensuring that the campus is accessible to all individuals.

#### **Multicultural Programs**

Multicultural Programs helps recruit and retain U.S. ethnic minority students. New Mexico Tech supports student chapters of the American Indian Science and Engineering Society (AISES), the Society of Hispanic Professional Engineers (SHPE), and the Society of the Advancement of Chicanos and Native Americans in Science (SACNAS). Multicultural Programs works to provide academic and financial support as well as providing information about opportunities within and outside the institution. Multicultural Programs is in the Student Affairs Office on the second floor of the Joseph A. Fidel Center. The phone number is 575.835.5060.

# International and Exchange Programs

Student Affairs is responsible for International and Exchange Programs. The office provides advice and counsel to international students, especially with regard to visa-related matters. It also coordinates activities, both on- and off-campus, designed to help students from other countries make the transition to living in the United States and Socorro. These activities include orientations, international receptions, International Education Week, and Global Village Day.

In addition, the office maintains information about study abroad opportunities in other countries, coordinates Tech's student exchange program with a number of foreign universities and participates in the New Mexico International Education Consortium.

# Student and Campus Life

#### Residential Life

http://externalweb.nmt.edu/reslife

New Mexico Tech housing consists of nine traditional residence halls and three student apartment complexes, including our Desert Willow townhouses which accommodate several dozen Tech students with families. All are within walking distance to classrooms, labs, the computer center, child care, research facilities, food service, and the bookstore. If you are a regular, full-time student, you are eligible to live on campus.

Four halls – Driscoll, Presidents, West, and South – sit on Tech's tree-lined Campus Drive, close to the gym, Joseph A. Fidel Student Center, the athletic field, Student Activity Center, swimming pool, and tennis courts. Baca Hall and Altamirano Apartments are just a block away. Desert Willow Apartments are southwest of these halls. Mountain Springs Apartments are on the corner of Bullock Boulevard and El Camino Real, just two blocks from Brown Hall.

Residence hall bedrooms come with a twin bed, desk, chair, closet, and dresser. Furnished apartments typically include a couch, chairs, coffee table and end tables. Family units and Mountain Springs single bedroom units are not furnished. All rooms come with Ethernet ports. Laundry machines are provided in each residence hall and there is no additional charge for using any washer or dryer. Laundry rooms are also available at Altamirano and Desert Willow apartments. Laundry is not available at Mountain Springs, however a public laundromat is located nearby.

**Driscoll Hall** was designed with friendliness in mind. Both floors in this all-female residence have large, open lounge areas, which are pleasant for group study and socializing. There is also a community kitchen. Rooms open into an interior hallway. Each wing shares a large, communal bathroom, and every bedroom has its own sink. The average room size is 14' X 14'.

**Presidents Hall** is one of New Mexico Tech's most historic buildings. It features large, comfortable rooms with a community bathroom. Presidents houses both males and females. Access keys will not allow entrance into opposite sex floors.

West Hall, an all male residence hall, is adjacent to the Joseph A. Fidel Center dining room. This two-story, corridor-style residence has four wings with communal bathroom facilities. Hallways run on the interior of the building with room windows surrounding the exterior. Average room size is 20' X 11'.

**South Hall** is a co-ed community featuring rooms arranged in suites, each consisting of two bedrooms and one bathroom. Each room has its own sink and vanity area, and each suite is shared by four students of the same sex. Bedroom doors open directly to an outdoors, open-air hallway. The average room size is 11' 6" X 19' 10".

**Baca Hall** is a co-ed building arranged in suites, sharing a bathroom among four people of the same sex. Each room also has its own sink and vanity area and the room opens directly to the outdoors. The average room size is 11' 8" X 23' 2". Baca Hall is part of our specialty housing. Alcohol and tobacco are prohibited regardless of age, and quiet hours are enforced 24 hours a day.

Altamirano Apartments offer single-bedroom, shared apartment for four students per unit. A select number of two-person apartments are also available. Each apartment is furnished and has a fully functional kitchen and ample closet space. The complex also offers study rooms and outdoor courtyards.

Desert Willow Apartments Desert Willow is located in a quaint cul-de-sac just across the road from Altamirano. The two-bedroom, 1 1/2 bath townhouse apartments offer a secure, community-like atmosphere for families and some graduate students. The complex has six buildings with six apartments per building for a total of 36 units. Just around the corner from Tech's Children's Center, Desert Willow also features its own playground for families to enjoy right in their backyard.

Mountain Springs Apartments is located within walking distance of campus, at the corner of Bullock and El Camino Real. Single-bedroom, single occupancy apartments are available as well shared apartments with single and double-bedrooms. All apartments include wireless and high-speed internet connections.

If you live on campus, you are expected to abide by Residential Life rules and procedures, which are found in the *New Mexico Tech Student Handbook*, the Room and Board Agreement, and the *Community Standards for Residence Halls* webpage <a href="https://www.nmt.edu/current-student-info/144-residence-halls-standards">https://www.nmt.edu/current-student-info/144-residence-halls-standards</a>.

#### **Food Court and Meal Plans**

https://www.nmt.edu/prospective-a-incomingstudents/134-meal-plans-dining-info

The New Mexico Tech food service is operated by

Chartwells, located in the Joseph A. Fidel Center, and is designed to meet the needs and lifestyles of students. The dining program offers an array of multicultural cuisine in addition to high-quality home cooking. Chartwells offers meal plans that are flexible, convenient, and excellent in value. Dining options range from fresh foods with unlimited seconds for those students on the meal plan, to an assortment of comfort foods, gourmet coffees, sandwiches, salads, and a la carte selections. Special events and theme dinners are offered each month. Steak and shrimp night is offered every two weeks.

Students living in the traditional halls are required to choose one of the following flex meal plans: 150 +75 Tech dollars, 175 + 50 Tech dollars, 200 + 25 Tech dollars, or 225 + 25 Tech dollars per semester. Students living in the campus apartments are required to purchase one of the following three meal plans; 30 meals + 125 Tech dollars, 50 meals + 50 Tech dollars or 60 meals. Block plans of 25 are available for non-on campus students. Meals and Tech dollars do not carry forward from semester to semester. However, if a student runs low on meals there is a variety of smaller plans that can be purchased at any time.

During the fall and spring semesters, the food court is open from 7:00 a.m. to 7:00 p.m. weekdays and from 11:30 a.m. to 7:00 p.m. on weekends. Meal plans may be used at any time during these open hours. Tech Dollars may be used in the food court or the Fire and Ice Coffee Shop. Fire and Ice, located adjacent to the food court, is open from 7:00 a.m. to 11:00 pm weekdays and from 2:00 p.m. to 9:00 p.m. on weekends.

#### Children's Center

The New Mexico Tech Children's Center offers full-time and part-time quality and developmentally appropriate education and care for children of New Mexico Tech students and employees, as well as community members. Our staff has an uncompromising commitment to excellence. The Children's Center equally places a high priority on responsiveness and close working relationships with each child and family. We offer a relaxed and casual setting for children ages two through six in our two preschool classrooms. The program in these rooms focuses on active learning and social engagement to build appropriate skills and knowledge in young children. We also have after school care for children attending the public schools in grades kindergarten through second grades. This care is available during the school year on any day that school has been in

session. Our Center is open year-round, from 7:30 a.m. to 5:30 p.m., Monday through Friday. Please contact the Children's Center at 575.835.5240 or asullivan@admin.nmt.edu, or visit the Center located on Olive Lane next to Macey Conference Center for more information.

#### Student Health Center

The Health Center is a convenient and confidential way to meet the health needs of Tech students. The medical staff provides primary medical care, which includes history taking, physical examination, and lab testing as needed for both acute and chronic health problems. The nurse practitioner can diagnose, prescribe and provide treatment. Medical care outside the center's scope of practice will be referred to a physician.

### Extracurricular Activities SCOPE and Master Calendar

The Public Information Office and Information Systems Division (ISD) provide services to help you find out what is happening on campus. Events for the next few days are listed in the left-hand column of the Tech homepage, <code>www.nmt.edu</code>. SCOPE is emailed twice a week, on Mondays and Thursdays. There is also a Tech calendar on the web, covering events for the next few years.

The Public Information Office also provides news releases telling about the latest research and activities on campus. Be sure to check the Tech homepage for the most recent information.

#### Student Government

Students at New Mexico Tech assume important responsibilities for the regulation of their affairs. The Undergraduate Student Association is comprised of all enrolled undergraduate students who have paid the Student Activity Fee. Its governing body is the Student Senate, whose members are elected twice a year for one-year terms. With the approval of the Tech administration, the Student Senate regulates extracurricular activities, organizations, and events. The Senate carries out its functions through the creation of its own committees, and its deliberations are open to all students and other interested persons. Any enrolled student may serve in the Senate if properly elected.

The Graduate Student Association (GSA) is comprised of all enrolled graduate students who have paid the Student Activity Fee. The GSA represents graduate students on policy-making committees, including Graduate Council, Faculty Senate, and the Student Association. The association works with the administration to address issues relating to graduate

student life at Tech. They award travel grants for graduate students to present research at professional meetings and provide for extracurricular activities for graduate students and their families. The governing body for the GSA consists of officers and representatives from each department.

#### **Physical Recreation**

The Physical Recreation Department enhances campus life by promoting wellness activities and offering instruction, wellness counseling, Intramural sports, and club sports to the Tech community.

A number of Physical Recreation courses are offered for credit, such as yoga, basketball, volleyball, aerobics, golf, zumba, belly dancing, and many more. In addition, Physical Recreation maintains a fully-equipped weight room and offers training in the use of equipment. The Tech community may use this facility at no charge.

Physical Recreation also oversees a number of club sports, including air riffle shooting, caving, climbing, golf, Frisbee, martial arts, soccer (men's and women's), paintball, rugby, and volleyball (men's and women's). Rugby, soccer, and volleyball belong to regional leagues and compete against off-campus teams.

Equipment for backpacking, canoeing, camping, volleyball, and other recreational activities can be borrowed from the gym.

Other recreational facilities on the Tech campus include an outstanding 18-hole golf course and a year-round swim center.

There are groups in the Socorro area that hold regular events in running and mountain-biking. Many members of the Tech community participate in these.

#### **Social and Cultural Activities**

The New Mexico Tech Performing Arts Series (PAS) brings a wide variety of entertainment to campus. Shows are generally free to students. In any given season, shows may include Celtic, classical, Cajun, Latin, world beat, swing, jazz, blues, folk and bluegrass music; theatre; circus arts (juggling, acrobatics, magic), comedy, dance, and more! PAS shows are a great way to spend an evening with friends or family, to see professors in a social setting, and to experience an amazing array of national touring performers.

The Student Activities Board (SAB) also brings entertainment to campus. The SAB sponsors events such as Comedy Night, Movie Night, poetry slams, dances with live salsa or swing bands, barbecues with DJ's, dances, open-mic nights, and mid-night breakfast held on Sunday before finals week each semester. The SAB and PAS work together to find entertainment that will interest Tech students.

The Student Association funds various Tech clubs. The SAB organizes two big celebrations each year. In the fall, 49'ers is a celebration of Tech's mining heritage. Spring Fling gives students a fun break in the spring. Both feature games, contests, music, dances, barbecue dinners, and other events.

#### Socorro and New Mexico

Socorro is a friendly community of over 9000 people, located in the sunny Rio Grande valley 75 miles south of Albuquerque. The main industries in Socorro are education, research, and tourism, with the largest employers being New Mexico Tech and the National Radio Astronomy Observatory. Socorro's population has one of the highest percentages of Ph.D.s per capita in the state of New Mexico.

Outdoor activities abound in the area. The nearby Magdalena Mountains and the slightly farther Gila Wilderness Area offer hiking, camping, rock climbing, fishing, hunting, and many other activities. Developed downhill ski areas are as close as Albuquerque and include Ruidoso, Cloudcroft, Santa Fe, and Taos (New Mexico), or Aspen and Durango (Colorado). Socorro's year-round mild climate is ideal for bicycling, running, golfing, horseback riding, river rafting, and many other pursuits.

In addition to outdoor activities, cultural amenities are also available nearby. Albuquerque offers restaurants, museums, music, theater, and many other cultural activities. Farther north, Santa Fe is a major art center. The entire state, with its long, colorful history is an enchanting place to live and to explore.

Socorro has a pleasant, sunny climate year-round. Average rainfall is less than 10 inches per year, and there are occasional brief winter snows.

#### **Student Clubs and Activities**

A host of student clubs, organizations, and activities flourish at Tech. These are as broad as student interests themselves, including:

#### **Performance Groups**

Chorus

Drama Club

Jazz Band

Orchestra

Spring Musical

#### **Club Sports**

Baseball

Caving

Climbing

Cricket

Golf

Martial Arts

Paintball

Rugby: Men's and Women's

Shooting

Soccer: Men's & Women's

Ultimate Frisbee

Volleyball: Men's & Women's

Paintball

#### **Games**

Adventurers' Guild Billiards Club

Chess Club

#### **Just for Fun**

Anime Addicts

Aquatic Recreation

KTEK (student radio station)

Miner's Ink (creative writing journal)

Paydirt (student newspaper)

Society for Creative Anachronism

Tech Amateur Radio Association

#### **Professional Associations**

American Association of Drilling Engineering (AADE)

American Association of Petroleum Geologists and the Society for Exploration Geophysicists (AAPG-SEG)

American Chemical Society

(ACS)

American Indian Science and Engineering Society (AISES)

American Institute of Chemical Engineers (AIChE)

American Society of Civil Engineers (ASCE)

American Society of Mechanical Engineers (ASME)

Association for Computing Machinery (ACM)

**Engineers Without Borders** 

(EWB)

Institute of Electrical and Electronics Engineers (IEEE)

International Society of Explosives Engineers (ISEE)

National Society of Black Engineers (NSBE)

Society for the Advancement of Chicanos and Native Americans in Science

(SAGNAS)

Society of Automotive Engineers (SAE)

Society of Economic Geologists (SEG)

Society of Hispanic Professional Engineers (SHPE)

Society of Mexican American Engineers and Scientists

Society of Technical Communicators Trinitite (STC)

Society of Women Engineers (SWE)

### The Graduate Program

(www.nmt.edu/~grad/)

The graduate program provides opportunities for advanced study and research in the basic sciences, computer science and mathematics, the earth sciences, and several engineering fields at both the Masters and Doctoral level. Our Master of Science for Teachers' program provides a growing number of New Mexico secondary school teachers with science and mathematics tools to challenge students in their classrooms. The Master of Engineering Management program provides a unique opportunity for working engineers and scientists to obtain the skills needed for expanding responsibilities in the technology fields. Students are provided the opportunity to learn the spirit as well as the methods of productive scholarship.

#### **Research Opportunities**

Outstanding opportunities for a wide range of field investigations in the sciences and engineering disciplines are made possible by New Mexico Tech's location in the Southwest.

Langmuir Laboratory, at an elevation of 3,240 m (10,630 ft) in the nearby Magdalena Mountains, is a unique facility for the study of thunderstorms and other atmospheric phenomena.

The Very Large Array (VLA) radio telescope on the plains to the west of Socorro and the Magdalena Ridge Observatory located on the mountain near the Langmuir Laboratory, provide extraordinary opportunities for astronomical research. Headquarters for the VLA and Very Long Baseline Array (VLBA) radio telescopes are located on campus (the VLA and VLBA are facilities of the National Radio Astronomy Observatory, distinct from New Mexico Tech). Graduate students in the earth sciences are afforded expanded research and funding opportunities through the National Science Foundation research consortium, the Program for Array Seismic Studies of the Continental Lithosphere (PASSCAL), located on campus and tasked with exploring the Earth's interior through the collection, distribution, and analysis of seismic data.

Present on campus are the New Mexico Bureau of Geology and Mineral Resources and the Petroleum Recovery Research Center, making New Mexico Tech especially attractive for graduate study in the Earth, mineral science and engineering fields.

The Energetic Materials Research and Testing Center provides opportunities for graduate work in

materials and mineral engineering, mechanical engineering, chemistry, physics, geophysics, computer science, and applied mathematics. The Playas Training and Research Center provides a unique setting research related to urban combat, drug interdiction and border security training programs, complete with state-of-the-art surveillance and monitoring equipment.

The Institute for Complex Additive Systems Analysis (ICASA) is a venture dedicated to studying the behavior, vulnerabilities and predictability of complex systems. ICASA's unique, interdisciplinary, strategic approach harnesses information-age relevant research, the application of that research to real-world problems, development of key enabling technologies, and the training and education of our nation's next generation of critical systems thinkers.

The Computer Science and Engineering
Department in collaboration with ICASA has been
designated as a National Center of Excellence in
Information Assurance Education and Research by the
National Security Agency and the Department of
Homeland Security. The associated Scholarship for Service
program provides funding for student education and
training in cyber security to prepare them for government
service in information assurance.

Faculty and facilities from all divisions of Tech provide advanced courses and research opportunities for graduate students.

### Applying for Graduate Admission Regular Admission

Interested persons who have completed or will complete a bachelor's degree prior to admission and have a record that indicates good potential for advanced study (undergraduate GPA of 3.0 is used as a general guideline) and research in Tech's programs are encouraged to apply for admission to graduate study. Applicants are strongly encouraged to submit online applications available on the internet at <code>www.nmt.edu/~grad/</code>. Printed forms can be requested by e-mail from <code>graduate@nmt.edu</code> or by mail from:

Graduate Office New Mexico Tech 801 Leroy Place Socorro, New Mexico 87801

To be assured of consideration for assistantships and fellowships, completed applications must be received by:

- February 15 for the fall semester
- September 15 for the spring semester
- May 1 for the summer semester. Individual

departments may have earlier dates for consideration of assistantships. To be assured of consideration for admission, completed domestic applications must be received no later than August 1 for the fall semester, January 2 for the spring semester, and May 1 for the summer semester. To allow enough time for the admission decision and the acquisition of passports and visas, international students are advised to make sure their application, supporting documents, and application fee are in the Graduate Office by March 15 (for summer and fall semesters) or by September 15 (for spring semester).

Admission to graduate study at New Mexico Tech and the award of financial aid are made to qualified individuals without regard to race, color, creed, sex, or national origin.

### Master of Science and Doctor of Philosophy Degrees

In addition to completed application forms, applicants for Master of Science and doctoral programs must provide:

- 1) Sealed, official transcripts of all college work (unofficial copies may be used for application, but sealed, official copies are required before admission).
- 2) References from three professors and/or employers familiar with the applicant's academic, professional, and/or research performance
- 3) An application fee of \$45.00 for those using domestic and online international applications, or \$60 for international application packets mailed to applicants
- 4) Official Graduate Record Examination (GRE) scores. GRE General Exam scores are not required for the Master of Science for Teachers program, but are required for many other Master of Science, Master of Engineering Management and Doctor of Philosophy programs. Please refer to the listings at http://www.nmt.edu/graduate-degree-programs for the GRE General Examination requirements for each program. If your GRE scores are required by the program to which you are applying, but they are no longer available because you took the examination too long ago, you must retake the GRE examination. (Unofficial copies may be used for application, but official copies are required before admission.)

A few departments may also require a subject test score. Information related to departmental requirements for the subject GRE may be obtained

- online, from the Graduate Office, or by contacting the department to which you are applying. The subject test must be in the same field in which the applicant intends to major.
- 5) Domestic applicants seeking financial aid of any kind are strongly encouraged to submit a completed Free Application for Federal Student Aid (FAFSA) form. The FAFSA form is available online from http://www.fafsa.ed.gov/.

#### Master of Engineering Management (MEM)

NMT's MEM program offers a terminal degree to individuals with undergraduate backgrounds in calculus-based engineering or applied science and work experience in an engineering and/or applied science discipline. Individuals with undergraduate backgrounds in other areas who have at least two years of work experience in a technical environment will also be considered for admission to the program. Preference among all applicants will be given to individuals with at least two years of relevant work or military experience.

In addition to completed application forms, applicants for the Master of Engineering Management program must provide:

- 1) Sealed official transcripts of all college work (unofficial copies may be used for application, but sealed, official copies are required before admission);
- 2) References from three individuals familiar with the applicant's academic and professional capabilities. We prefer that at least one reference form/letter be submitted by a past or current supervisor. If the applicant is an entrepreneur with no supervisor, a reference form/letter from a business associate is acceptable;
- 3) An application fee of \$45.00 for those using domestic and online international applications, or \$60 for international application packets mailed to applicants;
- 4) Official general Graduate Record Examination (GRE) scores. If your GRE scores are no longer available because you took the examination too long ago, you must retake the GRE examination.
- 5) A current resume that includes information about the applicant's work history, especially in engineering or applied science;
- 6) Applicants with three or more years of work experience with an undergraduate GPA of less than 3.0 must provide detailed information about recent work experience and references from at least two recent supervisors who are able to evaluate the applicant's potential for success in the NMT MEM program;

7) A statement of the applicant's goals. This short (two pages or less) statement should summarize the applicant's career goals and briefly describe how the NMT MEM program will aid in achievement of those goals.

#### Master of Science for Teachers (MST)

Applicants to the Master of Science for Teachers program must provide the following in addition to the completed Master of Science for Teachers' application materials:

- 1) Sealed, official transcripts of all college work (unofficial copies may be used for application, but sealed, official copies are required before admission);
- 2) A letter of reference, preferably from your department chair or principal, indicating your interest and abilities related to the pursuit of your MST degree; and
- An application fee of \$45 for those using domestic and online international applications, or \$60 for international application packets mailed to applicants.

#### **Certificate Programs**

The Electrical Engineering and Hydrology graduate programs offer post-baccalaureate certificates. Certificates provide an opportunity for students and working professionals to expand and update their knowledge in these fields at the graduate level without committing to a graduate degree.

#### International Students

New Mexico Tech is authorized under federal law to enroll nonimmigrant alien students. Such applicants wishing to be regular graduate students must complete the international (rather than the domestic) application form. International applicants whose native language is not English are required to take the Test of English as a Foreign Language (TOEFL) or the International English Language Testing System (IELTS) examination in addition to the GRE. An internet-based TOEFL (iBT) score of 76, computer-administered score of 207 or paper-administered score of 540 or IELTS score of 6 is used as a guide for admission. Information about these examinations is available from the Educational Testing Service, Princeton, New Jersey 08540.

For the 2013-2014 academic year graduate students paying out-of-state tuition at New Mexico Tech may expect to spend \$40,000 (including tuition,

fees, room and board, and reasonable personal expenses) for one calendar year of study. Visit the web page at http:// www.nmt.edu/tuition-and-fees for up to date information on costs. In-state tuition rates, which reduce the total by about \$14,000, are available to international students *only* if they have been granted assistantships or qualified fellowships. Financial statements must be included with the application. Applications from international students, complete with supporting documents, and application fee should arrive in the Graduate Office by March 15 (for summer and fall semester) or by September 15 (for spring semester) to allow enough time for the admission decision and the acquisition of passports and visas. To be assured of consideration for assistantships and fellowships, completed applications must be received by February 15 for the summer and fall semesters and by September 15 for the spring semester. Individual departments may have earlier dates for consideration of assistantships. Tuition and fees are payable upon registration. Deferred payment plans are available for those holding assistantships.

#### **Provisional Admission**

Applicants for regular admission may be granted provisional admission if their previous work is deficient in either quality or quantity. Subject to the major department's approval, students admitted provisionally may be advanced to regular graduate student status after one or more semesters of satisfactory academic performance and completion of the designated deficiencies. Credits earned for designated deficiencies may not be used towards a graduate degree. Students admitted or placed on provisional status must advance to regular status before a degree can be conferred. Students admitted or placed on provisional status are not eligible for financial support including assistantships and cannot work on campus.

#### **Special Admission**

Those who have baccalaureate degrees and who wish to earn graduate credits as their qualifications warrant may be admitted as special graduate students. Special graduate students are not degree candidates and are not eligible for most forms of financial aid including assistantships, fellowships, and student employment. Special graduate status does not qualify international students for student visas. Application for special graduate status must be made using an application for Admission as a Special Graduate Student available online or from the Graduate Office (see contact information under Regular Admission). Request for transfer to regular status must be made using the application for regular admission. No more than 12 credit hours earned as a special graduate student may be applied toward a graduate program.

#### **Dual Registration**

Simultaneous registration as a graduate student and undergraduate student may be approved subject to the following conditions:

- 1) Admission to a five-year program:
  - a) The student admitted to one of the approved five-year programs who wishes to qualify as a graduate student during his or her senior year must apply for admission and be admitted to the graduate program before the end of their junior year.
  - b) Once admitted to the graduate program, the five-year student will spend his or her senior year as a dual registered student.
- 2) In the last semester before graduation, any student may apply for dual registration in his or her last semester before graduation under the following criteria:
  - a) the student has applied for admission and been accepted to the graduate program;
  - b) the student is within nine credit hours of the undergraduate degree;
  - c) the required undergraduate credits must be completed in the first semester;
  - d) the student has a minimum grade-point average of 3.0; and
  - e) where more than one department is involved, the approval of the undergraduate's major department must be obtained.

Students holding dual registration are not eligible for assistantship and fellowship appointments, but may have work authorizations.

#### Financial Assistance for Graduate Students

A majority of regular graduate students at New Mexico Tech receive financial aid in the form of assistantships, fellowships, study grants, or part-time employment. Requests for financial support should be made on the Application-for-Admission form or in writing to the department if the student is already registered. To qualify for these aids, the student must first be admitted as a regular full-time student. Continuation of the award is contingent upon the student maintaining the minimum level of registration (at least 12 credits each fall and spring semester and 6 credits during the summer semester) and satisfactory academic progress as described below. A student failing to complete the length or terms of his or her contract forfeits the right to obtain a new or replacement contract during the interval covered by

the original contract. A student failing to maintain registration requirements while on contract forfeits the right to obtain a contract during the next registered semester. Fellowships are grants-in-aid for full-time study and research leading to an advanced degree. Assistantships normally require half-time service in teaching or research. Quarter-time appointments may be made in some cases. Students holding assistantship appointments qualify for resident tuition.

Assistantships and fellowships are awarded to qualified U.S. citizens and international students to support them in their educational objectives. The advisor, the department chair, and the Graduate Dean must approve any additional employment or remuneration.

#### **Teaching Assistantships**

Teaching assistants are typically appointed for nine months at competitive stipend levels. Additional teaching duties or research opportunities during the summer are sometimes available. Teaching assistants will have from six to ten contact hours per week plus preparation and grading of assigned recitation, laboratory, or tutorial duties. The maximum teaching load for regular instructional duties is six credit hours.

#### Research Assistantships

Many graduate students are supported on grants, contracts, or division research funds under the supervision of a faculty member. Research done under the assistantship may or may not be applicable to thesis or dissertation requirements. As is the case throughout the United States, New Mexico Tech is increasingly involved in contract research for corporations and governmental entities, and many times, portions of these research projects cannot be published because of commercial or national security concerns. While a research assistant may complete conditions of employment by working on such projects, there must be a prior understanding between the student, advisory committee, and funding source regarding precisely what will be available for the student's thesis or dissertation, and what will not be available. Documentation of such understanding is to be signed by all parties (student, supervisor, and funding agency/agent) and filed with the Graduate Office prior to the beginning of graduate student involvement in the research project. Research assistants commonly receive summer appointments as well as nine-month academic year appointments.

#### **Fellowships**

Fellowships for the support of graduate students are available from the Institute, professional and industrial organizations and certain federal agencies. Amounts range from those covering tuition and fees to full support including monthly stipends. Fellows must devote full time to studies and research.

### Need-Based Financial Aid for Graduate Students

Graduate students who are U.S. citizens or resident aliens are eligible to apply for Direct Stafford Unsubsidized Student Loans and Direct Graduate PLUS Loans. Regular graduate students must be registered for at least six hours per semester to be eligible for federal aid.

### Satisfactory Academic Progress for Financial Aid

Financial Aid offices are required to have a policy regarding Satisfactory Academic Progress. The purpose of this policy is to measure a student's academic progress in both a quantitative and qualitative way. This is done by measuring both credit hours earned and cumulative grade point average. To continue receiving Federal Financial Aid students must meet the minimum requirements set in New Mexico Tech's Satisfactory Academic Progress Policy. Be aware that these standards are not the same as New Mexico Tech's standards for academic probation and suspension (page 53).

At New Mexico Tech, satisfactory academic progress is reviewed at the end of each payment period (semester). The Satisfactory Academic Progress Policy applies to graduate students that participate in the Federal Direct Loan or Federal Direct Grad PLUS Loan programs.

To be in good standing for Financial Aid purposes a graduate student must earn at least 67% of the hours they attempt with a cumulative G.P.A. of at least 3.0. If you fall below this standard, you will be placed on financial aid warning for the following semester. During this semester, you will still be eligible to receive aid. To get back in good standing, you will need to meet the policy requirements by the end of the warning semester. If you do not meet the policy requirements by the end of the warning semester, you will be placed on financial aid suspension. Once a student is on financial aid suspension, he/she is not eligible for any Federal Financial Aid until the standards of the Satisfactory

Academic Progress Policy have been met or an appeal is approved.

Students have the opportunity to appeal the determination that they are not making satisfactory academic progress. To appeal the student will need to complete an Appeal Form. On that form the student will need to explain why he/she failed to meet our Satisfactory Academic Progress standards and what has changed that will allow him\her to meet the standards by the end of the next semester. If an appeal is approved the student's Satisfactory Academic Progress status will change to either Probation (1 semester of eligibility) or Probation with a plan (Continued eligibility as long as conditions of individual plan are met).

There is also a maximum financial aid timeframe that a student has to complete a graduate degree. The maximum for a master's degree is 45 attempted credit hours. This includes all hours attempted as a graduate student regardless of the course level. The maximum timeframe for a doctor of philosophy degree is 75 attempted credit hours. This includes all hours attempted at that level.

#### **Employment**

Part-time, on-campus employment is sometimes available to regular, full-time graduate students for up to 20 hours per week. Hourly campus employment requires a minimum registration of six credits in the fall and spring semesters, while assistantships requires a minimum registration of 12 credits. Students who are not progressing towards their degree over the summer may have campus employment if they are preregistered full-time for the fall semester.

#### Annual Leave

Graduate students on twelve-month assistantship or fellowship contracts are allowed two weeks of annual leave. Scheduling of the vacation period will be worked out with the advisor. Teaching assistants follow the regular academic calendar.

#### Academic Freedom and Tenure

Graduate student teaching and research assistants are included in New Mexico Tech's academic freedom and tenure policy.

#### **Graduate Program Policies**

See the *Graduate Student Handbook* at *www.nmt.edu/grad-current/* for more information.

#### **Graduate Student Status**

#### Regular

A regular graduate student is a degree-seeking student admitted to a graduate degree program at New Mexico Tech.

A regular full-time graduate student is one enrolled for nine to thirteen credit hours per fall or spring semester (six credit hours in the summer semester). Graduate students may register for a 13th credit of Community College or Physical Recreation courses at the 100-200 levels. Such registrations carry no additional tuition charge. Courses numbered 300+ to be counted for the graduate degree, non-credit Community College classes and 100/200- level classes required as leveling courses do not qualify for the tuition free 13th credit. Graduate students on assistantships must register for 12 qualifying credits in fall and spring (300-500 level) and 6 credits in summer.

A regular part-time graduate student is one enrolled for eight or fewer credit hours per semester and is not eligible for financial support. To be admitted as a part-time graduate student, an applicant must meet the same standards for admission as a regular full-time graduate student. A full-time graduate student may request transfer to part-time status provided the student is in good standing. Similarly, a part-time graduate student may request transfer to full-time status provided the student has a cumulative gradepoint average of at least 3.0 for those courses in which a standard letter grade is received.

A regular distance graduate student is one admitted to one of the graduate degree programs that incorporate distance delivery as a major component of its instructional offerings. There are currently no graduate degrees that may be obtained solely by distance delivery. Distance graduate students are typically place bound or employed full-time. To be admitted as a regular distance graduate student, an applicant must meet the same standards for admission as a regular full-time or part-time graduate student. Distance students register for as many credits as are necessary, but typically not for more than 13 credits. Each distance student must register for at least one semester in each academic year to be regarded as a continuing student. Failure to do so will require that the student reapply for admission to the graduate program.

#### Provisional Graduate Status

Provisional (full-time, part-time, or distance) graduate status may be granted to students whose previous work is deficient in either quality or quantity. Subject to the major department's approval, students admitted provisionally may be advanced to regular graduate student status after one or more semesters of satisfactory academic performance and completion of the designated deficiencies. Credits earned for designated deficiences can not be used towards a graduate degree. Students admitted or placed on provisional status must advance to regular status before a degree can be conferred. Provisional students are not eligible for financial support and cannot work on campus.

#### **Special Graduate Status**

Special graduate status provides an opportunity for those who have baccalaureate degrees to earn up to nine graduate credits hours per semester. Special graduate students are not degree candidates and are not eligible for assistantships, fellowships, and student employment. The Graduate Dean will either serve as the advisor for special graduate students or designate a faculty member as advisor. Request for transfer to regular status must be made using the application for regular admission. No more than 12 credit hours earned as a special graduate student may be applied toward a graduate program.

#### **Advisor and Advisory Committee**

Each regular and provisional graduate student will be assigned a temporary advisor by the department from the student's major field of study at the time of first registration. The full time student will formalize a thesis, dissertation, or independent-study advisor and an advisory committee by the end of the student's second semester of residency. Part-time and distance education students must formalize their committees by the time they complete 12 credits. The student's academic advisor must be a regular (tenured, tenure-track or emeritus) faculty member of the department in which the student is pursuing his or her degree. The academic advisor will typically serve as the student's research advisor, however, in some cases a separate research advisor may be designated. The research advisor is responsible for guiding the student to the completion of their research project and for supervision of the preparation of the research report (thesis, dissertation or independent study paper). A research advisor need not be a regular departmental faculty member. Regular faculty members from the department or interdisciplinary program may not be in the minority on a committee. The department chair and the Graduate Dean must approve the advisor and members of the advisory board. Committee forms are available via banweb.

At the master's level, the advisory committee consists of at least the academic advisor and two other members. At the doctoral level, the advisory committee consists of at least the advisor and three other members. One of these members must be from outside the department and must be assigned or approved by the Graduate Dean. Some departments require five members on the doctoral advisory committee. The academic advisor serves as chair of the advisory committee. The student should meet with his or her advisory committee at least once a year.

#### **Course Program**

Courses to be used towards each of the graduate degrees at New Mexico Tech must meet the requirements of the degree being pursued and must have prior approval of the student's advisory committee. These courses constitute the student's Course Program. The approved Course Program must be on file in the Graduate Office no later than the end of the second semester of residency. Part-time and distance education students must formalize their committees by the time they complete 12 credits. The course program is reported on the committee report form, available online and from the Graduate Office. Graduate course programs must be approved by the graduate dean.

#### **Course Load**

Regular and provisional full-time and parttime graduate students are required to continue registration each semester until certified for the degree. Regular distance students must register for a minimum of one semester each academic year and their registrations must conform to the plan of study developed with their advisory committee and on file in the Graduate Office. Students who's registration lapses will be required to meet the requirements of the current catalog if they are readmitted to a graduate program. The minimum course load for a full-time graduate student is nine credit hours (12 credit hours if on support) per fall or spring semester; six credit hours during the summer semester if they are progressing towards the degree. Part-time graduate students must register for eight or fewer credits per semester. Credits taken to satisfy minimum registration requirements must be numbered 300 or above and must be applicable to the graduate program as determined by the advisory committee. Written permission from the advisor, the department head, and the Graduate Dean is required for exceptions to the described course load.

Regular and provisional graduate students registered for other classes may audit one class and associated lab if applicable. Audit credits apply to the semester course requirements, but do not earn credits toward a degree.

Part-time status is not granted as a means to reduce registration for a full-time student while completing the final requirements leading to their degree. A full-time graduate student in good standing who has two or more years of residence, has completed all course work, has filed an Intent to Graduate, and who has no assistantship or fellowship support, may request reduced registration for only one semester. The request is accomplished via a reduced registration request form, available in the graduate office and online, which must be approved by the advisor (acknowledging that it is expected that the student will finish in that semester) and the graduate dean. While in this category, the student must enroll for at least three credit hours of thesis, independent study, or dissertation. Full time students may only have a work authorization with a reduced registration of at least six credits.

#### **Grades**

At the time of graduation, the cumulative GPA must be 3.0 for all courses numbered 300 or above with no grade less than "C." Any course taken while a graduate student with a grade below "C", must be retaken at NMT before a degree can be conferred. The grade point average for course credits designated for the degree must be 3.0 or above. Independent study (590), thesis (591), or dissertation (595) courses will be graded with either PR (progress) or U (unsatisfactory). A student will be placed on probation for earning a "U" in independent study, thesis, or dissertation. A second "U" in independent study, thesis, or dissertation may result in dismissal from graduate school. Only those credits graded PR (progress) accumulate toward the minimum required number of credits for research.

Directed research (500) and other courses taken on a S/U basis may not be used to fulfill graduate degree requirements.

#### **Graduate Co-op Experience**

Graduate students may chose to gain research experience as part of their graduate program by performing sponsored work away from campus. To be involved in co-op experiences students must:

- 1) submit a letter of application to the Graduate Dean with supporting letters from the student's advisor or graduate committee;
- 2) be a regular full-time student in the semester of application;
- 3) enroll in a Directed Research course (500) in their department during the co-op period, maximum of 12 months;

4) provide a final report and any other requirements placed on the student to their graduate committee on completion of the co-op experience. The student is responsible for arranging the co-op experience with both their advisor and with the work sponsor.

#### **Graduate Degrees for Faculty and Staff**

Instructors in the College Division and staff members of the Bureau of Geology and Mineral Resources, Petroleum Recovery Research Center, Institute for Complex Additive Systems Analysis, and Research and Economic Development Office who are not on tenure may pursue programs leading to Master's or Ph.D. degrees. NMT policy does not permit administrative officers and members of the faculty with the rank of assistant professor or above to take advanced degrees.

Employees who wish to pursue a degree program should apply for admission to the department desired by using standard forms available online or from the Graduate Office. Time limits for degree programs apply.

#### Leave of Absence

In certain circumstances, a candidate may interrupt progress toward the degree by petition to the Graduate Dean for leave of absence for one or more semesters. Such letters must carry the endorsement of the student's advisor and the department chair. While on leave, the student does not have access to the facilities and staff of the Institute.

#### Satisfactory Academic Progress

To demonstrate satisfactory academic progress, each regular graduate student must:

- earn a grade-point average of 3.0 or better each semester;
- receive no grade less than C for those courses in which a standard letter grade is received;
- formalize their advisory committee:
  - full-time students must formalize their advisory committee and establish their Course Program no later than the end of the second semester of residency as a regular graduate student;
  - part-time and distance education students must formalize their advisory committee and establish their Course Program before the completion of 12 credits;
- satisfactorily complete sufficient credits

- full-time students must satisfactorily complete a minimum of nine credit hours (12 credit hours if on support) each fall or spring semester; six credit hours must be completed during the summer semester if in residence (as described under Course Load, page 54);
- part-time students must be registered for eight or fewer credits each semester; distance students must register according to the plan on file with the Graduate Office;
- all graduate students may audit at most three credits per semester (requiring an "S" for satisfactory progress); and
- perform satisfactorily on their research as guided by their research advisor.

Assistantships or fellowships are subject to immediate termination if satisfactory academic progress is not achieved. Any student who is struggling with academic performance is encouraged to discuss the situation with their instructor(s), advisor(s), and the graduate dean. Any student who fails to maintain satisfactory progress for two consecutive semesters will be dropped from regular graduate student status. Such students may apply for special (non-degree) status without financial support. After completion of nine credit hours (four for part-time students) within a single semester in courses approved for the degree program with a grade-point average of 3.0 or better and no grade less than C, the student may petition the department for return to regular graduate status.

### Thesis, Independent Study, and Dissertation Requirements

The thesis or dissertation is to be written with the intention of publication. The thesis or dissertation must include a preliminary, roman-numbered section containing the title page, acknowledgments, abstract, table of contents, list of figures, and list of tables. The acceptance sheet, signed by the members of the committee, is included at the end of the preliminary section of the thesis or dissertation. Arabic page numbering should begin with page 2 of the body of the thesis. Appendices may be included. The bibliography should include only references cited in the text. Templates and detailed instructions for completion of the thesis manuscript are available online at: <a href="http://">http://</a> www.nmt.edu/grad-current/. Master's theses and Ph.D. dissertations must be publicly presented and defended. After a successful defense and completion of all changes required by the student's committee, a thesis or dissertation must be submitted to the Graduate Office for

publication online, in the Joseph R. Skeen Library, and be submitted for publication elsewhere. The thesis or dissertation submitted to the graduate office must be the version approved by the graduate committee. No changes can be made to theses or dissertations after submission to the graduate school for degree completion. As a result, no changes can be made to any thesis or dissertation that has been delivered for public dissemination.

As is the case throughout the United States, New Mexico Tech is increasingly involved in contract research for corporations and governmental entities, and many times portions of these research projects cannot be published because of commercial or national security concerns. While a research assistant may complete conditions of employment by working on such projects, there must be a prior understanding between the student, advisory committee and funding source regarding precisely what will be available for the student's thesis or dissertation, and what will not be available. Documentation of such understanding is to be signed by all parties (student, supervisor, and funding agency/agent) and filed with the Graduate Office prior to the beginning of graduate student involvement in the research project.

#### **Thesis and Dissertation Completion**

Completed digital and printed theses or dissertations and digital copies of independent study abstracts must be submitted to and approved by the Graduate Office no later than two weeks prior to the end of the semester in which the requirements for the degree are to be completed. Although students may complete their degree at any time, students must allow two weeks processing time before a letter of completion can be guaranteed. Further, degree conferral takes approximately two months from the date of final submission of all materials to the graduate office. During the winter holiday, degree conferral typically takes three months.

#### **Digital Thesis and Dissertations**

Students writing theses or dissertations must deposit complete digital copies of their manuscripts with the Institute's online digital thesis and dissertation database. Theses and manuscripts or portions thereof that are published must be uploaded and circulated locally pending receipt of approval from the publisher for global circulation. If the publisher denies permission, only those portions affected will be limited to local circulation. Please visit the Graduate Studies web pages or the Graduate Office for information on

submission of digital manuscripts. Digital manuscripts must be <u>submitted</u> and <u>approved</u> by the <u>Graduate Office</u> two weeks prior to the end of the semester in which the requirements for the degree are to be completed. A copyright form must be completed and signed at time of <u>submission</u> of the digital manuscript.

#### **Bound Volumes**

Three printed copies must be submitted to and approved by the Graduate Office two weeks prior to the end of the semester in which the requirements for the degree are to be completed. These three volumes must be printed using permanent ink or toner on 20-pound bond paper, or a high quality, low acid photocopy paper. The text must be single-spaced and all materials (text, tables, and diagrams) must be within page margins of one and one -half inches for the left (bound) margin, and one inch for the top, bottom, and right margins. Photographic reproductions must be of a permanent nature and be securely bonded to each page. Complete guidelines and templates for manuscript preparation are available on line at <a href="http://www.nmt.edu/grad-current/">http://www.nmt.edu/grad-current/</a>.

#### **Independent Study Requirements**

Formats for the preparation of Independent Study papers should conform to the requirements of the advisor, advisory committee and department where the student is enrolled, but may follow the guidelines for theses and dissertations (above). A digital version of the independent study abstract must be submitted to the New Mexico Tech online digital thesis and dissertation database no later than two weeks before the end of the semester. If for any reason, an Independent Study report is published through the New Mexico Tech Library, it must also be submitted to the New Mexico Tech online digital thesis and dissertation database.

#### **Time Limits**

All work presented to fulfill the requirements for a master's degree must be completed within three calendar years from the date of first registration. The corresponding limit for the doctoral degree program is a total of five years past the master's degree or a maximum of seven years if the student enters the program after completing only a bachelor's degree.

Extensions of these limits may be made in special cases, but only upon recommendation by the department and with the approval of the Graduate Dean. Time limitations for part-time students will be considered on an individual basis.

Funding limits for graduate students holding

fellowship or assistantship appointments are two years for a master's level degree or three years beyond the master's level for the doctoral degree. Consideration for extension beyond these limits can be given through petition to the Graduate Dean.

#### **Transfer Credits**

A maximum of 12 credit hours of course work with grade B or better earned at another accredited institution may be approved by the student's advisory committee and major department for transfer credit into the master's program. The student's advisory committee considers transfer credit in doctoral programs on an individual basis. To be approved, such credits must not have been used to satisfy the requirements for a previous degree.

For details of the transfer credit policy applicable to the Master of Science for Teachers program, see page 117 of the Program and Course Catalog.

#### **Tuition and Fees**

Please refer to pages 44-45 for information on the costs of tuition, housing, medical insurance and other fees affecting graduate students.

#### **Completion of Degree Requirements**

During the final semester of residence, the student must have on file a Declaration of Intent to Graduate with the Registrar's Office. Deadlines are July 1 for those completing their degrees in December and December 1 for those completing their degrees in May and August. The Declaration communicates the candidate's intent to fulfill the degree requirements. When completing this form, the student is recommended to verify with their advisor and the graduate office that they will have met all degree requirements prior to completion of their next semester.

Generally, at least eight weeks prior to the end of the candidate's planned defense, preliminary copies of the candidate's thesis or independent study paper must be in the hands of the advisor.

Two weeks prior to the defense, the complete defense draft (with the preliminary section, figures, bibliography, and appendices) must be in the hands of the committee.

The student must be registered for the semester during which the thesis or dissertation is defended or the Independent Study is approved. Students may pay a fee to defend/ present between semesters, but they must have been registered the semester before and they must have permission of their full committee. Between semester defense and all requirements must be completed before close of registration for the subsequent semester or the student must enroll and pay for registration.

The chair of each graduate advisory committee will submit a written report to the student with copies to the chair of the department and Dean of Graduate Studies within five days of the defense of a thesis or dissertation. In this report, the chair shall state that the thesis or dissertation is accepted as submitted and defended or explain what needs to be done in order for the thesis or dissertation to be accepted. The report will be initialed by the members of the advisory committee or they must be cc'ed if the report is submitted via email (email to <a href="mailto:graduate@nmt.edu">graduate@nmt.edu</a>).

Two weeks prior to the end of the semester the completed report of the advisory committee and either three final copies of the accepted, successfully defended thesis or dissertation must be submitted to the Graduate Office or one final copy of an accepted independent study paper must be submitted to the student's advisor and advisory committee. At this time, approved digital versions of thesis, dissertation, or independent study abstracts must be uploaded into the Tech Digital Thesis Database.

#### Appeal

All requirements for graduate degrees are subject to appeal to the Graduate Council through the appropriate department.

### **Graduate Degree Requirements**

#### **Graduate Minors**

A graduate minor at the master's level requires at least 12 hours in the minor area, at least 6 of them at the 500 level. At the doctoral level, a minor requires at least 18 hours, 12 of them at the 500 level. Courses used for a bachelor degree or bachelor minor may not be used for a graduate minor. Specific requirements for minors must be approved by the Graduate Council and Faculty Senate.

#### **Master of Science Degree**

General requirements are common to all Master of Science degree curricula in the science and engineering fields. Specific requirements are listed under appropriate departments.

#### **General Requirements**

It is required that a student preparing to complete the M.S. degree:

- 1) Have competence in the subject matter of the standard introductory college courses in chemistry and physics.
- 2) Have a working knowledge of at least calculus and the content of one additional course in mathematics beyond calculus;
- 3) Have a minimum of six credit hours of approved upper-division or graduate course work from another department. The advisory committee may determine that a student's previous academic experience has provided breadth and may recommend modification of this requirement; and
- 4) Complete a research project culminating in a thesis or independent study paper.

#### **Approvals**

- 1) The appropriate department grants admission to its graduate program.
- 2) The appropriate department and the Graduate Dean must approve the composition of each graduate student's advisory committee.
- 3) The graduate student's advisory committee must approve the student's thesis or independent study research project. The MS degree will not be awarded until the thesis or independent study paper has been approved by the advisory committee.
- 4) Coursework to be applied toward the degree must meet the associated degree requirements and be approved by the graduate student's advisory committee and the Graduate Dean.

#### **Research Options**

There are two research options, M.S. with Independent Study and M.S. with Thesis. Each option requires a minimum of 30 credit hours. Some departments do not recognize the Independent Study option.

M.S. with Independent Study requires:

Completion of at least 27 credit hours of approved course work, with at least 15 credit hours of 500-level courses, exclusive of research credits;

Completion of at least three credit hours of independent study; and

Submission of a formal paper describing the results of the research to the candidate's advisor and advisory committee.

Submission of a digital abstract of the independent study to the Graduate Office.

M.S. with Thesis requires:

Completion of at least 24 credit hours of approved course work, with at least 12 credit hours of 500-level courses, exclusive of research credits;

Completion of at least six credit hours of thesis work;

Satisfactory oral defense of the thesis research; and Submission of three final copies of the thesis to the Graduate Office.

Submission of a digital copy of the thesis to the Graduate Office.

# Combined Five-Year Bachelor of Science/Master of Science Programs

These programs in which a student may earn a Bachelor of Science degree as well as a Master of Science degree in five years are available:

Biology: Five-Year Program,

Environmental Engineering: Five-Year Program,

Hydrology: Five-Year Program,

Materials Engineering: Five-Year Program,

Mathematics: Five-Year Program,

Electrical Engineering: Five-Year Program.

Students admitted to five-year programs must apply for admission to the graduate program during their junior year. Students who are enrolled in five-year programs may count at most one 500 level course towards both their undergraduate and graduate degree; no undergraduate courses may be counted toward both degrees. During their senior year, these students will be dual registered (page 30).

#### **Master of Engineering Management**

New Mexico Tech's Master of Engineering
Management graduate program is designed to provide
working engineers and on-campus graduate students
with a one-year terminal degree in Engineering
Management. The curriculum is designed to be
innovative and can be delivered both on campus and,
via distance education. Specific requirements related
to the Master of Engineering Management degree
curricula are listed in the Program and Course Catalog.

# **General Requirements** Approvals

- The Management Department grants admission to its graduate program.
- The Management Department and the Graduate Dean must approve the composition of each graduate student's advisory committee.
- The graduate student's advisory committee must approve the student's final research project.

  The MEM degree will not be awarded until the final project paper has been approved by the advisory committee.
- Coursework to be applied toward the degree must be approved by the graduate student's advisory committee and the Graduate Dean.

#### **Research Option**

- In addition to a final project, the Master of Engineering Management degree requires:
  - Completion of at least 27 credit hours of approved course work, with at least 15 credit hours of 500-level courses;
  - Completion of at least three credit hours of independent study; and
  - Submission of a final project paper describing the results of the final project to the candidate's advisor and advisory committee.
  - Submission of a digital abstract of the final project paper to the Graduate Office.

#### **Master of Science for Teachers**

The graduate program in science for teachers provides graduate-level classroom and laboratory instruction for secondary school teachers of science and mathematics and leads to the Master of Science for Teachers (MST) degree. Courses for science teachers are offered on the campus during the summer session and through distance education during the academic year. Specific requirements for the Master of Science for Teachers degree curricula are listed in the Program and Course Catalog.

#### **General Requirements**

#### **Approvals**

- The Master of Science for Teachers program grants admission to its graduate program.
- The Master of Science for Teachers program and the Graduate Dean must approve the composition of each graduate student's advisory committee.
- The graduate student's advisory committee must approve the student's thesis or independent study research project. The MST degree will not be awarded until the thesis or independent study paper has been approved by the advisory committee.
- Coursework to be applied toward the degree must be approved by the graduate student's advisory committee.

#### **Research Options**

There are two research options, MST with Independent Study and MST with Thesis. Each option requires a minimum of 30 credit hours.

- M.S. with Independent Study requires:
  - Completion of at least 27 credit hours of approved course work, with at least 15 credit hours of 500-level courses;
  - Completion of at least three credit hours of independent study; and
  - Submission of a formal paper describing the results of the research to the candidate's advisor and advisory committee.
  - Submission of a digital abstract of the independent study to the Graduate Office.

#### M.S. with Thesis requires:

- Completion of at least 24 credit hours of approved course work, with at least 12 credit hours of 500-level courses;
- Completion of at least six credit hours of thesis work;
- Satisfactory oral defense of the thesis research; and Submission of three final copies of the thesis to the Graduate Office.
- Submission of a digital copy of the thesis to the Graduate Office.

# General Requirements for a Second Master of Science Degree at Tech

Students who wish to earn a second master's degree at Tech must:

Satisfy the specific course requirements in both fields, and

Complete either:

- 9 additional approved credit hours plus a thesis (6 or more credit hours) in the second field, or
- 12 additional approved credit hours plus an independent study (3 or more credit hours) in the second field.

Second degrees may not be available from some departments.

#### **Doctor of Philosophy Degree Requirements**

The degree of Doctor of Philosophy requires a high level of competence in a recognized field of learning, and only those students showing unusual promise are accepted. A dissertation that contributes to the general field of knowledge must be written and defended before a committee of the faculty. No doctoral degree will be awarded without full committee approval of the doctoral dissertation and its defense.

The doctoral student can expect to spend at least five or more years of study and research beyond the bachelor's degree in order to complete the program. In addition to dissertation credits, course requirements for each specialty are listed under the programs and courses of instruction for each department.

Doctoral degree programs are available in chemistry, computer science, the earth science fields, materials, mathematics, petroleum engineering, and physics. Faculty, courses, research fields, and specific requirements for these programs are given under the appropriate department listing.

#### **Preliminary Examination**

Each department may require a preliminary or qualifying examination for the students admitted to its doctoral degree program. Students contemplating doctoral studies at the university should contact the respective department regarding the administration of these examinations.

#### **Candidacy Examination**

The purpose of the candidacy examination is to evaluate the student's ability to complete dissertation research. The exam is taken before enrollment in or accumulation of dissertation credits, typically after

completion of the majority of graduate course work. The candidacy exam is the responsibility of the individual department; the graduate student should consult the respective departments about candidacy exams. Passing the candidacy exam is one of several steps that must be completed prior to Admission to Candidacy. Graduate committees can and should require additional coursework and/or other remediation for deficiencies discovered during the candidacy exam. Any such remediation is to be added to the students graduate file in the graduate office.

#### **Admission to Candidacy**

A doctoral student may apply for candidacy upon completion of a minimum of one year of graduate study at NMT. A student qualifies for admission to candidacy by:

- 1) Averaging B or better in coursework taken;
- 2) Passing the preliminary or qualifying examination at an approved level;
- 3) Passing the candidacy examination; and
- 4) Showing preliminary work under way on a dissertation subject; typically this is done through the defense of a dissertation proposal.

Candidacy must be achieved at least one year prior to the time the degree is conferred.

#### Dissertation

The doctoral dissertation demonstrates the candidate's capacity for independent research. The student may register for dissertation hours only after successfully advancing to candidacy. A minimum of 24 credit hours distributed over one or more years must be devoted to the dissertation after candidacy has been achieved. The student is encouraged to explore the various current research projects in his or her field of interest before choosing a dissertation subject. The dissertation must be defended before the NMT faculty under the supervision of the student's advisory committee. Manuscript requirements are on page 35. An external examiner will be included on the defense committee. The candidate must be registered during the semester in which the completed dissertation is submitted to the Graduate Office. Students may pay a fee to defend between semesters, but they must have been registered the semester before and they must have permission of their full committee. Between semester defense and all requirements must be completed before close of registration for the subsequent semester or the student must enroll and pay for registration. Doctoral candidates are required to present at least one departmental or general seminar on the dissertation during their tenure as a graduate student. Before the degree is approved and granted, at least one paper on the subject matter of the dissertation must be submitted to a

recognized journal acceptable to the doctoral committee of the student. Generally, significantly more research publication is expected.

#### **Departmental Certification**

The appropriate department must certify to the Graduate Office that the general requirements are being satisfied and that the candidate is making required progress. The method of evaluation varies with the department. Certification is transmitted to the Graduate Office on forms provided by the Graduate Office. These forms are:

The Advisory Committee Form, and The Report of the Advisory Committee, which records the actions of the student's advisory committee.

#### **Completion of Requirements**

A record of all steps completed in a particular student's program is kept in the Graduate Office. When all the requirements are completed, the record of the program is sent to the Registrar for the student's permanent file. If the graduation and other fees have been paid, and a Declaration of Intent has been filed and approved by the Registrar, the candidate's name will be presented to the Faculty Senate for recommendation of conferral of degree to the Regents.

#### **Postdoctoral and Visiting Scholars**

Postdoctoral fellows, research associates, and visiting scholars are accommodated as appropriate in research programs within departments. The faculty host and department negotiate arrangements, with an official appointment made by the NMT administration. International guests may visit classes on an informal basis by arrangement with the instructor. If credit or audit privileges are desired, application must be made through the Graduate Office.

# **Financial Aid for Graduate Students**

[Contact: Financial Aid Office, New Mexico Tech, 801 Leroy Place, Socorro, N.M. 87801; 575.835.5333; fax: 575.835.6519]

New Mexico Tech makes every effort to make our graduate education affordable for everyone. Assistance comes in the form of federal financial aid and student employment.

#### **Financial Aid**

To apply for financial aid you must complete the Free Application for Federal Student Aid (FAFSA). There are a couple of ways to submit your FAFSA for processing. You may send the completed paper copy of the application form in the envelope provided with the application, OR you may apply over the internet at www.fafsa.gov. New Mexico Tech's Title IV code for the FAFSA is 002654.

For maximum consideration, please submit your FAFSA for processing before May 1, if you plan to enter the following fall.

Approximately 30 percent of all applications are selected for review in a process called verification. If your file is selected for verification, additional documents are needed. The financial aid office will notify you if additional paperwork is needed and inform you what that paperwork is. Verification must be completed before a financial aid package will be calculated for the student.

The FAFSA results from the federal processor contain your Expected Family Contribution (EFC) number. This number is used to determine your eligibility for the various financial aid programs.

We will offer you a package to try to meet your needs at New Mexico Tech. Our offer to you may include grants, loans, or work-study. To accept our offer, please log into your New Mexico Tech BanWeb account.

To qualify for financial aid at Tech, you must:

- 1. be a U.S. citizen or an eligible non-citizen,
- 2. show satisfactory academic progress,
- 3. be enrolled in a regular degree program at Tech
- 4. not be in default on a federal student loan or owe a repayment on a federal grant.

#### **Continuing Your Financial Aid at Tech**

Each year, you must fill out the FAFSA. This form should be filed as soon as possible after January 1. For maximum consideration you should fill out the FAFSA before our priority deadline of May 1.

# Satisfactory Academic Progress for Financial Aid

Financial Aid Offices are required to have a policy regarding Satisfactory Academic Progress. The purpose of this policy is to measure a student's academic progress in both a qualitative and quantitative way. This is done by measuring both cumulative grade point average and credit hours earned. To continue receiving Federal and/or State Financial Aid, students must meet the minimum requirements set in New Mexico Tech's Satisfactory Academic Progress Policy. Be aware that these standards are not the same as New Mexico Tech's standards for academic probation and suspension.

At New Mexico Tech, satisfactory academic progress is reviewed at the end of each payment period (semester). The Satisfactory Academic Progress Policy applies to both undergraduate and graduate level students that participate in the following programs: Federal Pell Grant, Supplemental Grant, New Mexico State Student Incentive Grant, College Affordability Grant, Federal Work Study, New Mexico Work Study, New Mexico Non-need Work Study, Perkins Loan, Federal Direct Stafford Loan, Federal Direct Grad PLUS Loan, and Direct PLUS loan.

The three components of the Satisfactory Academic Progress Policy (qualitative, quantitative, and maximum time frame) are explained below.

#### **Quantitative Standard**

Graduate students must earn (successfully complete) at least 67% of the total credit hours they attempt with a 3.0 cumulative GPA.

Earned credit hours are calculated this way:

<u>Cumulative hours successfully completed</u>

Cumulative hours attempted

Total hours attempted includes grades of A, A-, B+, B, B-, C+, C, C-, D+, D, F, S, U, W, WO, IN, SA, UA, PR NG and all transfer credits.

Total hours earned includes grades of A, A-, B+, B, B-, C+, C, C-, D+, D, S, PR, and all transfer credits.

Cumulative GPA includes grades of A, A-, B+, B, B-, C+, C, C-, D+, D, F

Repeat courses - count as attempted hours, but the hours can only be earned once. For example, if a student takes a 3 credit hour course one semester and earns a D the hours are counted as attempted and earned. If the student later repeats the course, the 3 hours are added to the attempted, but hours earned will not increase because of the repeat. However, because a grade of F does not count as earned hours, a student repeating a grade of F at a later time and earning a D will have the hours count as attempted and earned when the course is repeated.

IN, NR, NG grades - It is the student's responsibility to notify the Financial Aid Office when a grade of IN, NR, NG is changed to a grade by the instructor so Satisfactory Academic Progress can be re-evaluated.

#### **Maximum Time Frame**

- Students pursuing a master's degree may be eligible up to a maximum of 45 attempted credit hours. This includes all hours attempted as a graduate student regardless of the course level.
- Students pursuing a doctor of philosophy degree may be eligible up to a maximum of 75 attempted credit hours. This includes all hours attempted at that level.

When you fall below the SAP policy requirements you will automatically be placed on financial aid warning for your next semester of enrollment. During this semester you will be eligible to receive aid.

If you are still below the policy standards after the financial aid warning semester, you are no longer eligible for Title IV aid.

Once a student is on financial aid suspension, he/she is not eligible for any Federal or State Financial Aid until the standards of the Satisfactory Academic Progress Policy have been met or an appeal is approved.

#### Satisfactory Academic Progress Status

Result of SAP measurement	<u>Status</u>	Description	<u>Eligibility</u>
Never received Title IV aid before	<u>X</u>	Not reviewed	<u>Eligible</u>
Meeting SAP policy standards	<u>OK</u>	<u>Satisfactory</u>	<u>Eligible</u>
1st Failure to meet SAP policy standards	<u>WARN</u>	Warning	Eligible for 1 payment period
Failure to meet SAP policy standards at end of warning period	<u>SUSP</u>	Suspension	Not eligible

#### Appeals for Exception to Standards of Satisfactory Academic Progress Policy

Students have the opportunity to appeal the determination that they are not making satisfactory academic progress. To appeal the student will need to complete an Appeal Form. On that form the student will need to explain why he/she failed to meet our Satisfactory Academic Progress standards and what has changed that will allow him/her to meet the standards by the end of the next semester. If an appeal is approved the student's SAP status will change to either Probation or Probation with a plan.

A student can remain eligible for aid once they have had an appeal approved with conditions (probation with a plan) as long as the student continues to meet the individual "plan" that was set forth for them in the appeal response.

Satisfactory Academic Progress is measured at the end of each semester. Summer is considered a separate semester. If a student's earned hours or cumulative gpa falls below the minimum standard indicated in the policy, he/she will be notified in writing. The student will also be notified if he/she has met the maximum time frame.

Result of	<u>Status</u>	Description	<b>Eligibility</b>
appeal			
Approved	<u>PROB</u>	Probation	Eligible for 1 payment period
Approved with conditions	PROBPL	Probation with a plan	Eligible as long as conditions of plan are met

#### **Financial Aid Policies**

#### **Return of Title IV Funds Policy**

This policy applies to all students that participate in the following Title IV financial aid programs.

- Federal Pell Grant
- Supplemental Grant
- Perkins Loan
- Federal Direct Stafford Loan
- Federal Direct Grad PLUS Loan
- PLUS Loan

Federal regulations require that if a recipient of Title IV financial aid funds (those programs listed above) withdraws from New Mexico Tech after beginning attendance for the semester, the amount of Title IV assistance earned by the student must be determined. This is done through a calculation developed by the United States Department of Education. If the amount disbursed to the student is greater than the amount the student earned, unearned funds must be returned. If the amount disbursed to the student is less than the amount the student earned, and for which the student is otherwise eligible, he or she is eligible to receive a post-withdrawal disbursement of the earned aid that was not received.

The amount of assistance the student has earned is based upon the percentage of the semester in which the student was enrolled.

Enrolled days / total number of days in the semester = % of aid earned.

Once the student has completed more than 60% of the semester, he/she is considered to have earned all of the funds awarded and is not subject to the calculation.

There are two types of withdrawals for Title IV financial aid purposes:

- Official Withdrawals If the student officially notifies New Mexico Tech of his or her intentions to withdraw, this date is considered to be your last date of attendance and will be the official withdrawal date for calculating the amount of Title IV financial aid funds earned. This applies to both withdrawal (W) and withdrawal without prejudice (WO).
- Unofficial Withdrawals—If a student receives grades of all F, U, or UA for a semester, the student is considered to have unofficially withdrawn from New Mexico Tech. The midpoint of the semester is used as the student's unofficial withdrawal date unless documentation is submitted to show a different last date of attendance at an academically related activity.

#### **Entrance Loan Counseling Policy**

According to federal law, if you intend to borrow money on the Perkins Loan or Federal Direct Loan programs, you must complete entrance loan counseling. Go to *www.studentloans.gov* and sign in to complete Entrance Loan Counseling. Complete the entrance loan counseling for the type(s) of student loans you intend to borrow or have been offered.

#### **Exit Loan Counseling Policy**

If you receive an education loan and you graduate, withdraw, drop below six credit hours, or do not re-enroll; you must complete exit loan counseling. Go to *www.studentlloans.gov* and click Student Loan Counseling interview on the left side. Complete the exit loan counseling for the type(s) of student loans you borrowed.

#### **Student Employment Policy**

All student employment is limited to a maximum of 20 hours per week during the fall and spring semesters. Maximum hours per week during the summer semester depend on the number of credit hours the student is taking. Any student employed under the work-study program must demonstrate satisfactory academic progress for financial aid (page 41). Students employed on a part-time basis must be enrolled as regular, full-time students. Students attending less than full-time are subject to IRS regulations regarding FICA/Medicare deductions.

A Student Employee Handbook is available online at www.nmt.edu/financial-aid and at the Financial Aid Office.

(A cooperative education program is available, in which students alternate periods of off-campus, full-time employment with on-campus, full-time study. See the Director of Student Services for more information.)

# **Expenses**

The information below is for the 2013-2014 school year. For current information on Tuition and Fees, check our web page at www.nmt.edu or call the Office of Admission at 1.800.428.TECH. All fees are subject to change without prior notice.

### Nonrefundable charges

	10 011011 900			
<b>Application Fees</b>		Admission Fe	ees	
\$15	Undergraduate	\$5	50	Undergraduate
\$45	Graduate	\$2	25	Graduate
Miscellaneous Fees		Graduation F	ees	
\$10	Challenge Exam fee (per semester hour)	\$3	30	Associates Degree
\$25	Deferred Payment Plan Fee	\$4	10	Bachelors Degree
\$25	ID Card Replacement Fee	\$5	50	Masters Degree
\$30	Late Registration Fee (per day)	\$6	80	PhD Degree
\$65	Late Validation Fee (per day)			
\$65	Orientation Fee			
\$15	Transcript Fee (per transcript/per academic year)			
\$3.82	Withdrawal Fee			

### **Refundable Charges**

member

Refundable	e Charges			
Tuition per sen	nester, Full Time Resident	Tuition per semester, Full Time Non-Resident		
\$2,522.76	Undergraduate (12 - 18 credit hours)	\$8,202.72 Undergraduate (12 - 18 credit hours)		
\$2,632.20	Graduate (9 - 13 credit hours)	\$8,716.59 Graduate (9 - 13 credit hours)		
Tuition per semester, Part Time Resident, per credit hour		Tuition per semester, Part Time Non-Resident, per credit hr		
\$210.23	Undergraduate	\$210.23 Undergraduate, 1 to 6 credit hrs		
\$292.80	Graduate	\$292.80 Graduate, 1 to 6 credit hrs		
		\$683.56 Undergraduate, 7 to 11 credit hrs		
Fees and Depo	sits	\$968.51 Graduate, 7 to 8 credit hrs		
\$6.00	Auxiliaries Fee (per credit hour)			
\$1.00	Institute Activities Fee (per credit hour)			

\$1.00	Institute Activities Fee (per credit hour)
Variable	Laboratory Usage Fee
\$4.50	Sports Activity Fee, (per credit hour)
\$93.00	Student Activity Fee, Undergraduate, 7 credit hours or more
\$46.50	Student Activity Fee, Undergraduate, 6 credit hours or less
\$82.84	Student Activity Fee, Graduate, 7 credit hours or more
\$41.43	Student Activity Fee, Graduate, 6 credit hours or less
\$6.50	Student Center Fee (per credit hour)
\$5.00	Student Center Base Fee, (per student)
\$20.00	Wireless Service Fee (per semester)
\$200.00	Room Reservation/Damage Deposit
\$200.00+\$50.00	
for each family	Family Housing Deposit

#### Housing and Meal Plan Charges

See the current rate sheet at:

https://www.nmt.edu/prospective-a-incoming-students/135-rate-sheets

The minimum estimated expenses which must be met **per semester** by single, full-time students living on campus at New Mexico Tech during the 2013-2014 school year are:

#### **Graduate Costs per Semester**

Resident	Non-Resid	lent
\$2,635.20	\$8,716.59	Tuition (based on 9-13 credit hours)
\$269.84	\$269.84	Student fees (est. total based on 9 cr hrs)
\$807.00	\$807.00	Personal expenses (estimated total)
\$2,999.00	· · ·	Room and board (double room, 150 + 75 ar meal plan)
\$527.00	\$527.00	Books and supplies (estimated)
\$7,828.04	\$13,909.43	Total Estimated Minimum
		Costs per Semester

The student should add travel costs and laboratory and special fees where applicable. Tuition, fees, and charges for room and board are subject to legislative and administrative change at any time. Charges for damage to property beyond normal wear and tear may be levied at the discretion of Tech.

A complete list of possible charges and an explanation of each appears on the next pages. Schedules outlining refund procedures follow. All charges are due and payable on or before registration or whenever they are incurred.

# Tuition

#### **Graduate Students**

Any graduate student who registers for 9 to 13 credit hours pays full tuition. Additional tuition for all hours carried above 13 credit hours will be charged at the semester hourly rate for residents or nonresidents as applicable. Graduate students registering for fewer than nine credit hours pay tuition at the semester hourly rates.

# Auditors, Special Students, and Senior Citizens

Students who audit courses (those who enroll in one or more courses for no credit) pay the same tuition and fees as credit students.

The non-degree-seeking student who has a bachelor's degree is regarded by New Mexico Tech as a Special Graduate Student. Special Graduate Students, as classified by the Office of Admission or Registrar, pay required tuition and fees per credit hour. Special Graduate Students may not register for more than nine credit hours in the fall or spring semester. Non-resident tuition is waived for special students enrolled for no more than six credit hours.

Special Graduate Students will be charged tuition at undergraduate rates for courses numbered less than 300 and graduate tuition for all courses numbered 300 and above.

Tuition for students 65 or older is \$5.00 per credit hour and must be requested at time of registration. Applicable fees must also be paid.

#### Residency

You are considered a resident of New Mexico if your parents or legal guardians are residents of New Mexico.

If you are over 18 years of age, you may become a legal resident of New Mexico while attending New Mexico Tech. See page 56 for information on changing your residency.

Non-resident aliens cannot obtain New Mexico residency.

With the exception of graduate students employed as teaching or research assistants, international students do not qualify for in-state tuition.

#### Navajo Residency

Registered members of the Navajo Tribe who reside anywhere within the Navajo Nation are considered New Mexico residents for tuition purposes.

#### Refunds

# Tuition and Applicable Fees, Fall and Spring Semesters

The student who drops all fall and spring classes at New Mexico Tech prior to 5 p.m. on the third Friday after classes begin will receive a refund according to the following schedule:

#### Refund of tuition and fees

Registration week (days 1 through 5)	100%
Days 6 through 12	75%
Days 13 through 19	70%
Days 20 and beyond	0%

The student who drops some, but not all, classes (reduction in class load) prior to 5 p.m. on the third Friday after classes begin will receive a 100% refund for the classes dropped.

#### After the third Friday after classes begin:

No refunds are made to students who withdraw from any or all fall or spring classes after the third Friday after classes begin.

# Tuition and Applicable Fees, Summer Semester

# Prior to 5 p.m. on the first Friday after summer classes begin

The student who drops any or all summer classes at New Mexico Tech prior to 5 p.m. on the first Friday after classes begin will receive a 100% refund.

#### After the first Friday after classes begin

No refunds are made to students who withdraw from any or all summer classes after the first Friday after classes begin.

#### **Financial Aid Implications**

Student receiving financial aid who withdraw from all classes are subject to a Return of Title IV Funds policy, which returns funds to the financial aid programs.

# Room (Apartment or Residence Hall) Cancellation Policy

#### **Entering Students**

- 1. Students entering New Mexico Tech for the following terms may cancel their agreement without penalty by June 1 (fall term), December 1 (spring term), and May 1 (summer term).
- 2. Between above dates and the beginning of the Apartment/Residence Hall term, the student will be charged a \$400 fee for breaking their agreement.
- 3. Room cancellations made after the beginning of the Apartment/Residence Hall term will receive no refund on their room rent. Fall semester residents who cancel their room for the following Spring semester will still pay the cost of the room.

#### **Returning Students**

- 1. Returning students may cancel their agreement for the upcoming academic year prior to June 1st without penalty.
- 2. Agreements canceled after June 1st will incur a \$400 penalty.
- 3. Room cancellations made after the beginning of the Apartment/Residence Hall term will receive no refund on their room rent. Fall semester residents who cancel their room for the following Spring semester will still pay the cost of the room.

Term dates are available on the Residential Life web site. www.nmt.edu/welcome-to-res-life

Cancellations must be in writing. No cancellations will be accepted over the phone. Students with extenuating circumstances for canceling their residence hall agreement must request a waiver of the penalty fee in writing to the Residential Life Office. The request will be reviewed by a committee.

#### **Board**

You may not cancel not make any changes to your board plan after the first Friday after registration each semester. Students with extenuating circumstances for canceling the room and board agreement must request, in writing from the Residential Life Office, a waiver for board refund.

#### **Payment of Fees**

- 1) Tuition and fees must be paid by registration or the student must be enrolled in a payment plan available on NMT's secure TouchNet site accessed through their account on Banweb (see no. 4). Financial aid that has been awarded to the student will be credited to the student's account at this time.
- 2) Students with delinquent accounts will not be allowed to register for a new semester.
- Payment for bookstore merchandise must be made in full at the time of purchase. (The bookstore accepts most major credit cards.)
- 4) Students are able to set up deferred payments and have two options through the e-billing system three- or four-payment installment plans. Students can establish a payment plan on all costs tuition, room-and-board and student fees with a 20 percent down payment due at registration. A non-refundable \$25 setup fee will be charged for students who elect to enroll in the deferred payment plan.
- To log in to the Tech e-billing page, visit https://secure.touchnet.com/C22533\_tsa/web/login.jsp
- 5) Students whose accounts are not paid in full by the due date or who have not made alternate arrangements with the Student Accounts Office are subject to permanent loss of academic credit, as well as disenrollment from all classes. Students have the right to appeal to the Graduate Dean in writing no later than one week (five working days) before the final payment date.
- 6) A check will automatically be issued to students with a credit balance of \$100 or more. Refund checks will be issued twice during registration week (actual days will be determined on a semester-by-semester basis) and every Friday afternoon thereafter. Students who have a credit balance of less than \$100 must request the refund at the Student Accounts office. Checks will be held at the Cashier's window for pick up by the student. A current, valid student ID must be presented. Students can also elect to have their refunds direct deposited to their checking or savings account via the e-billing system.

- All financial aid—including scholarships, loans, and grants—is applied during the semester in which it is awarded. Aid cannot be applied retroactively.
- 8) Rent for Student Family Housing must be paid in advance. Students with delinquent housing accounts may be asked to vacate campus residences.
- 9) Telephone charges must be paid by the tenth of the month, or service may be terminated.

# **Definitions of Fees**

#### **Admission Fee**

An Admission Fee is payable when the applicant is admitted and ensures the student's inclusion in the registration procedures. The fee is not refundable.

#### **Application Fee**

Each student applying for admission to New Mexico Tech must submit an application fee for graduate admission. This nonrefundable fee must be received before the application can be processed.

#### **Auxiliary Services Fee**

This fee defrays expenses of various auxiliary services on the campus, including the Swim Center, Macey Center, Golf Course, Children's Center, and Student Activity Center.

#### **Challenge Examination Fee**

Special or challenge examinations must be arranged in advance and a fee per semester hour is charged for each.

#### Computer Usage Fee

The Tech Computer Center charges a basic fee to each student who uses the machines. Additional fees for file storage space and printouts beyond the minimum will also be charged.

#### **Deferred Payment Plan Fee**

A fee is charged to students who qualify for a deferred payment plan covering room and board. One-third of the total amount is due at registration and the balance is due in accordance with a schedule set by the Business Office. Students will not be allowed to register for a new semester until their accounts are paid in full for the previous semester. Students who have delinquent accounts are subject to administrative withdrawal of current registration and loss of credits for the semester.

#### Graduation, Thesis, and Dissertation Fees

Students completing the master's and doctoral degrees are charged designated graduation fees.

#### I.D. Card Replacement

A fee is charged for the replacement of lost student identification cards. Broken or worn cards are replaced for no charge but must be turned it to the Registrar's Office at the time that the new card is issued.

#### Institute Activities Fee

The Institute Activities Fee provides a base for the support of student social and cultural activities and corresponding facilities.

#### Late Registration Fee

Students who fail to register during the designated period are charged a late fee. This stipulation applies to all regular graduate students. Special students are not charged this fee.

#### Late Validation Fee

Students who fail to validate their registration on the day of registration are charged a late validation fee. Students who register late and who do not validate their registration that day will also be charged. This fee applies to all regular undergraduate and graduate students. Special students are not charged this fee.

#### **Room and Board**

Room and board are charged through the Residential Life Office. The total amount varies depending upon the type of room occupancy and meal contract. The base rate is calculated for double occupancy of room with 150 block meal plan. Other meal plans are available. At an additional charge, single occupancy is offered when space permits. Students must supply all linens, including a mattress pad protector. More information is provided in the housing agreement, which must be executed for each academic year.

The semester charge for room and board does not include meals during recesses nor during the few days at the beginning and end of each semester when most students are away from the campus. The student may only occupy the room during break periods if they live in an apartment (Altamirano, Desert Willow, and Mountain Springs) . The traditional halls (Driscoll, Presidents, West, South, Baca, and Torres) are closed between fall and spring semesters and may be closed at other times between terms when conditions warrant. Schedules for residence halls and dining facilities are published on the Residential Life rate sheet.

#### **Room Reservation/Damage Deposit Fee**

A Room Reservation/Damage Deposit is required before housing will be assigned. The deposit will be refunded under the following conditions:

- The student has been declared academically ineligible to enter, continue, or return to New Mexico Tech.
- 2) The term of the student's Room and Board Agreement has been completed (i.e., the student has remained in the Residence Hall the entire academic year), and no damage has been noted.

If the student has filled out the necessary paperwork to ensure himself/herself a room for the semester but cancels the room reservation or does not show up for check-in by the first day of classes, the student is subject to the Room Cancellation Policy (page 46). If a student is unable to check in by the first day of classes, he or she must request, in writing, to have the room set aside for a specific day. This specific day should not exceed a week from the first week of classes.

#### **Sports Activities Fee**

This fee is charged each semester in support of the intramurals program and corresponding facilities.

#### **Student Activities Fee**

All students pay a Student Activities Fee each semester. The funds collected are disbursed to the student organizations and activities according to a budget prepared by the Student Association and approved by the administration.

#### **Student Center Fee**

A Student Center Fee provides monies to amortize and support the Joseph A. Fidel Center.

#### **Transcript Fee**

Students are entitled to one official transcript of their academic records without charge per lifetime. A fee is charged for further copies. Free unofficial transcripts are available to currently enrolled students.

#### Withdrawal Fee

Students who withdraw from a class or classes after registration closes must pay a withdrawal fee for every withdrawal authorization form.

#### **Tech Dollars Fee**

Tech Dollars are the same as cash and may be used for the purchase of drinks, snacks, to go items, and all menu items sold in the Fire & Ice Coffee Shop. As an example, if you have 75 Tech Dollars after the purchase of \$3 worth of food items the remaining balance would be 72 Tech Dollars. Tech Dollars apply to one semester only and may not be carried over to the next semester. No **Refunds** will be given for Tech Dollars. At the end of each semester Tech Dollars remaining in a student's account will be zeroed out.

# Registration

[Contact: Office of the Registrar, New Mexico Tech, 801 Leroy Place, Socorro, NM 87801; 575.835.5133; fax: 575.835.6511; registrar@admin.nmt.edu]

#### Orientation

Graduate orientation for incoming students begins the transition to New Mexico Tech graduate school. You'll have a chance to meet other graduate students, learn about requirements and support for graduate studies, and meet staff who will assist you during your studies.

Orientation is held at the beginning of fall semester. If you begin during the summer or spring semester, contact the Center for Graduate Studies to watch the orientation video.

Teaching assistantship orientation is required for all teaching assistants before they begin teaching and is held at the beginning of fall semester. If you begin during the summer or spring semester, contact the Center for Graduate Studies to watch the TA orientation video.

### **Registering for Courses**

Regular students can register online at *http://banweb.nmt.edu*. You must obtain your "alternate PIN" from your advisor before registering. Instructions for registering online can be found at the registrar's web page, *www.nmt.edu/registrars-office*.

Specific days are set aside for registration (see Academic Calendar). You may register online or in person through the second Tuesday of instruction. Registration after this period will depend upon the merits of each individual case.

Schedules of course offerings, with time and place of meeting and the name of the instructor in charge, are available at *http://banweb.nmt.edu* before the registration period of each semester or summer session.

A course may be cancelled if demand or resources are insufficient. Students are encouraged to discuss with their advisors their interest in courses not currently offered.

You must be enrolled in a class to attend that class. Students may not "sit in" on a class for which they are not registered at New Mexico Tech.

#### **Validation**

You must settle your financial status (validate) with the NM Tech Business Office before your registration will be considered complete. Students who have not validated by the Wednesday before the close of registration are subject to disensollment from classes.

### **Prerequisites and Corequisites**

Some courses have prerequisites, courses you must successfully complete before enrolling in that course. Exceptions can be made with the instructor's approval. If you enroll in a course in which you do not have the prerequisites without the instructor's permission, you may be disenrolled.

Corequisites are courses that should be taken during the same semester.

Prerequisites and corequisites are not determined by the student's individual catalog, but rather by the catalog in effect at the time that the course is offered.

### **Academic Advising**

Academic advising is one of the most important keys to a student's success. Academic advising provides the student with the necessary information about courses and degree requirements, but more importantly, the academic advisor serves as a mentor as the student explores the discipline and develops his or her professional identity. The advising system is designed so that:

- Each student is assigned a faculty advisor from the major department. Your academic advisor must be a regular (tenure-track or emeritus) faculty in your home department. Your academic advisor may or may not be the same as your research advisor. The default advisor assigned by the department upon graduate admission may be changed when you designate your committed in banweb.
- Each student works with his or her academic advisor each semester to plan the next semester's courses.
   The advisor must approve the selected coursework and sign the registration form.
- Students seeking to minor in a subject must obtain a faculty advisor for the minor.
- It is the responsibility of the student, in cooperation with the appointed academic advisor, to arrange programs so as to satisfy the common requirements for all graduate degrees and the specific requirements of the graduate program.

## **Registration Fees**

#### Late Registration Fee

Students who fail to register during the designated period are charged a late fee. This stipulation applies to all regular undergraduate and graduate students. Special students are not charged this fee.

#### Late Validation Fee

Students who fail to validate their registration by the first day of class are charged a late validation fee. Students who register late and who do not validate their registration that day will also be charged. This fee applies to all regular undergraduate and graduate students. Special students are not charged this fee.

#### **Proof of Insurance**

Regular full- or part-time students should have valid health and hospitalization insurance with a U.S.-based insurance company. Students are responsible for notifying the Student Health Center of any changes in their medical insurance. Student who do not have coverage with a U.S. based insurance company can purchase insurance through a company contracted through New Mexico Tech.

### Changes in Registration

A student may change his/her program by filing a Change-of-Registration form with the Registrar. No classes may be added after the second Tuesday following the beginning of classes. During the first three weeks of a fall or spring semester, and through the second Tuesday of the summer session, a student may drop a class without penalty, and the course will not appear on the permanent record. After the third week of classes in a fall or spring semester or the second Tuesday of a summer session, the student must file a Withdrawal Authorization Form and pay the withdrawal fee. The grade "W" will appear on the student's permanent record. A student may not withdraw (W) from a class after the tenth week of a fall or spring semester, or the fifth week of a summer session. You may change to audit or S/U up to the end of the tenth week of the semester or the fifth week of the summer session.

#### Repeating a Class

A computable grade is a grade with a numerical equivalent: A, A-, B+, B, B-, C+, C, C-, D+, D, or F. A noncomputable grade is a grade with no numerical equivalent: SA, UA, S, or U. See page 51 for numerical equivalents of grades. Students may not repeat courses at other institutions.

If you recei	ved
A, A-, B+, B,	В-
C+, C, or S	

### Then

You may not repeat the class for a grade or credit unless the course description specifically says you may. If a student's overall graduate GPA is below a 3.0, permission to repeat specific courses (with grades of B-, C+ or C) may be requested from the Graduate Dean to meet graduation requirements.

C-, D+, D, or F

You must repeat the class for a new letter grade and credit. (You may not repeat on an S/U basis.) The original grade will remain on your permanent record. The new grade will replace the old grade in calculation of your GPA, even if the new grade is lower. If you receive an F, you will receive 0 credit hours for the course, even if you previously received credit. You may not repeat the class at an institution other than New Mexico Tech.

SA, UA, or U

You may repeat the course for a grade and credit. If you repeat a course in which you received a U, you **must** take it for a computable grade.

### Withdrawing from a Course

(See also Withdrawal without Prejudice, page 52.)

You may withdraw and receive the grade of "W" from a course until the tenth week during the fall or spring semester (or the fifth week in the summer session). Talking with your instructor and advisor about your progress at midterm will help you make this decision. Other options include:

- Change to Satisfactory/Unsatisfactory (S/U), which will not affect your GPA. Note: *Graduate students cannot apply graded courses taken for S/U to graduate programs*. See page 52 for more information on S/U grading.
- Change to Audit. (See page 54 for information on audit grades.) Graduate students may audit at most 3 credits per semester and do not earn credit for audits. You are required to file the appropriate form with the Office of the Registrar in order to withdraw from a course or change to S/U or Audit.

# **Academic Policies**

[Contact: Office of the Registrar, New Mexico Tech, 801 Leroy Place, Socorro, NM 87801; 575.835.5133; fax: 575.835.6511; registrar@admin.nmt.edu]

### **Grading System**

A grade is reported for each course in which a student has enrolled to indicate the quality of performance in that course. The grading system used at NM Tech is as follows:

		<b>Grade Points</b>
Grade		Per Sem. Hr
A		4.00
A-		3.67
B+		3.33
В		3.00
B-		2.67
C+		2.33
C		2.00
C-		1.67
D+		1.33
D		1.00
F		0.00
S	Satisfactory (C– or better)	n/a
	(S grades not usable in graduate pr	rograms)
U	Unsatisfactory (D+ or worse)	n/a
SA	Satisfactory Audit	n/a
UA	Unsatisfactory Audit	n/a
W	Withdrawal	n/a
WO	Withdrawal Without Prejudice	n/a
PR	Progress	n/a

#### Grade Point Average (GPA)

The total institutional semester hours in which grades of A, A-, B+, B, B-, C+, C, C-, D+, D, and F have been received are divided into the corresponding total grade points earned to determine the student's cumulative grade-point average (GPA) (see page 8). Likewise, the student's GPA for any time period is found by dividing the credit hours in which grades other than S, U, SA, or UA were received into the total grade points earned during that period. The student's GPA indicates scholastic standing. Results of challenge examinations shall not be included in the student's class load for the semester in which the exam is taken. Transfer credit is not included in the GPA.

#### Satisfactory/Unsatisfactory (S/U)

Courses that are normally graded may not be taken on an S/U basis and applied to any graduate program. Graduate students in good standing may take up to a total of 3 credit hours on an S/U basis in courses not normally graded S/U in a given semester. However, such courses cannot be applied to any graduate program requirements. Courses may not be taken S/ U without consent of the student's academic advisor, the student's major department, and the department in which the course is taken. Approval for the S/U grade basis must be obtained within the first ten weeks of classes. Decisions made at that time for either letter grade or S/U grade evaluation may not be subsequently changed. Students who receive a grade of S will receive credit for the course but that credit will not be applied to any graduate program requirements. The student is not eligible to repeat the course unless the course description specifically says they may. Students who receive a grade of U will not receive credit for the course.

#### PR (Progress)

A grade of "PR" for independent study, thesis, or dissertation is given when satisfactory progress on research has occurred during the semester. If research progress has not been satisfactory, a grade of "U" (unsatisfactory) is issued. Students who earn unsatisfactory grades are not making satisfactory academic progress.

#### Withdraw (W)

A student may not **withdraw** (**W**) from a class after the tenth week of a fall or spring semester, or the fifth week of a summer session. A W can only be assigned after consulting with the instructor and completing and submitting the appropriate form to the Office of the Registrar (see Changes in Registration, page 50). Under no circumstances can an instructor assign a W in a course.

#### Change of Grade

The instructor of a course has the responsibility for any grade reported. Once a grade has been reported to the Office of the Registrar, it may be changed only in the case of clerical error or in the case of documented extenuating circumstances. The instructor who issued the original grade must submit in writing the reasons for the change. The change of grade must also be approved by the department chair. Changes in grade must be made within five weeks after the start of the next semester, except for extenuating circumstances.

#### **Grade Appeal Procedure**

Graduate students seeking grade changes must speak first with the instructor, next with the department chair, and finally with the Dean of Graduate Studies. A grade must be appealed no later than the end of the semester following the semester in which the student took the class. All questions can be referred to the Office of the Registrar.

#### Withdrawal without Prejudice (WO)

(See also Withdrawing from a Course, page 51.)

Under extremely unusual circumstances (for example, serious illness or death in the student's immediate family), a student may petition for a withdrawal without prejudice. Such a petition must be presented in writing with supporting documentation (i.e., statement from a physician, obituary, etc.) before the end of the semester to the Graduate Dean for review and consideration. Students may not withdraw without prejudice from a course they are failing due to plagiarism, cheating, or other disciplinary issues.

Charges for tuition and fees are not altered by such a withdrawal.

#### **Satisfactory Academic Progress**

Graduate students must achieve at least a 3.0 GPA every semester and earn no grade below C to maintain satisfactory academic progress. In addition, fulltime graduate students must enroll in at least 9 credits in the fall and spring or 12 credits if on contract and 6 credits in summer. Finally, students must achieve satisfactory progress in each research course / project. Failure to meet any of these requirements results in a failure to achieve satisfactory academic progress in the associated semester.

At program completion (for certificates, Masters, and Ph.D. degrees) graduate students must have at least a 3.0 cumulative and have no grade below C on their graduate transcript. Graduate students who do not meet these GPA requirements must retake the associated course(s).

# **Graduate Academic Probation and Suspension**

#### **Academic Regulations**

The academic regulations have a two-fold purpose:

- 1) to prevent the dissipation of the resources and time of students who fail to make reasonable progress in their academic programs at New Mexico Tech, and
- to facilitate the maintenance of high academic standards at New Mexico Tech.

#### **Academic Probation**

A graduate student who fails to achieve satisfactory academic progress will be placed on academic probation for the next regular semester of enrollment. Students are continued on probation if they withdraw from New Mexico Tech while on probation.

#### **Academic Suspension**

Graduate students who fail to achieve satisfactory academic progress for a second consecutive semester will be placed on academic suspension. A graduate student on academic suspension is denied the privilege of enrolling at New Mexico Tech for the specified period of time.

#### **Notification of Probation and Suspension**

Academic probation and suspension will appear on the student's official transcript at the end of each grading period.

#### **Duration of Suspension**

The first suspension from New Mexico Tech will be for one regular (fall or spring) semester. Second and subsequent suspensions will be for one calendar year. A student suspended after the fall semester is suspended for the following spring and summer semesters. A student suspended after the spring semester is suspended for the following summer and fall semesters. A student suspended after the summer semester is suspended for the following fall semester. Credits earned at another institution during the period of suspension at New Mexico Tech will not be accepted for transfer at New Mexico Tech.

#### **Appeal of Suspension**

A student who, after conferring with his or her advisor, feels that he or she has been unjustifiably

placed on suspension may appeal for a change of status by written petition to the Dean of Graduate Studies. A student may appeal suspension by petitioning for readmission. Petitions must be submitted to the Center for Graduate Studies by the day before classes begin.

### Requesting a Transcript

In order for your transcript to be released, you must have a zero or credit balance at New Mexico Tech.

Our goal is to have your transcript ready to be picked up or mailed within two working days after your request, except during peak processing periods. All transcripts are mailed through the US Postal Service, First Class Mail. During final grades processing, transcript requests are held until final grades are posted for that semester.

The cost is \$15.00 per academic year, with an additional \$3 charge if 1) you want the transcript faster than two working days or 2) you want the transcript faxed.

All students are allowed ONE free official transcript per lifetime (students must indicate this on the transcript request).

#### **Information Needed**

You must provide the following information to request a transcript:

- Transcript Request Form or a letter requesting your transcript
- Your name. If your name has changed, be sure to tell us the name you had when you attended NMT.
- Your address and phone number.
- Your NMT ID or Social Security number
- The approximate years you attended NMT
- Complete address(es) of where you want transcript(s) sent
- If transcript is to be sent to you, whether you want it in a sealed envelope. (Transcripts used for applications usually need to be in a sealed envelope.)
- Your signature

#### **Methods**

You can request a transcript:

- In person at the Office of the Registrar, Joseph A. Fidel Center, Room 285. Pay your fee at the Cashier's Office.
- By mail. Include a check for \$15.00 (U.S.) per academic year, made out to New Mexico Tech.

Send your request to:

Office of the Registrar New Mexico Tech 801 Leroy Place Socorro, N.M. 87801

- By fax. Include your MasterCard, Visa, or Discover card number and expiration date. If you are using a parent's card, that person should write "I'm authorizing [your name] to use my credit card," and add their signature. Our fax number is 575.835.6511.
- By e-mail. We can only accept a transcript request by e-mail if the e-mail contains a scanned copy of your signature. Follow the instructions above for requesting a transcript by fax. Send your e-mail to registrar@admin.nmt.edu.

#### **Rush and Faxed Transcripts**

You can request a rush transcript. The fee is an additional \$3 (total \$18.00). The transcript is usually sent out within one working day.

You can also request that we fax a copy of your transcript to a recipient. However, we require the recipient's physical address and will follow the fax with an official copy of your transcript. The fee is an additional \$3 (total \$18.00).

#### Other Policies

#### **Academic Load**

The academic year at NMT consists of two semesters. A class hour is 50 minutes in length; ordinarily, a laboratory period is about three times as long. One class hour or laboratory period a week through a semester gives one credit hour.

Full-time graduate students must carry a load of at least 9 credits each fall and spring semester. Graduate students on assistantships must carry at least 12 credits in the fall and spring. Graduate students who are in residence during the summer must register for 6 credits. Physical Recreation (PR), Fine Arts (FA), and Community Education courses (designated by the letter "C" in the course number) do not count toward the minimum credit hours for graduate students. Graduate loads normally only count courses numbered 300 and above.

Part-time graduate students must register each fall and spring semester for 1-8 credits. If in residence during the summer, part-time graduate students must register for 1-6 credits.

The Veterans Administration requires students on the GI Bill to carry a minimum of 12 credit hours (6 credit hours in summer) to qualify for full benefits. Physical Recreation (PR), Fine Arts (FA), and Community Education (designated by the letter "C" in the course number) courses do not count toward the minimum credit hours for veterans. Complete information can be obtained from the Veteran's Administrator.

#### **Attendance**

A student is responsible for all material covered in class; however, it is the decision of the individual instructor whether attendance is mandatory or optional. It is the student's responsibility to ascertain this. Illness or other circumstances that necessitate extended absence from class work should be reported as promptly as possible to the Graduate Dean, or designated representative who will notify the student's instructors.

Students on Military Active Duty must notify the Graduate Dean, or designated representative and provide appropriate documentation.

#### **Auditing a Class**

Graduate students may attend at most one three credit class as auditors; that is, they may enroll in a course for no credit, with the permission of the instructor of the course and their academic advisor. Auditors pay tuition and fees on the same basis as those who enroll for credit. No student will be allowed to change registration from credit to audit or from audit to credit after the tenth week of a regular semester or the fifth week of the summer session. Students may not change from credit to audit or audit to credit more than once in a class. Auditors receive grades of SA (satisfactory audit) or UA (unsatisfactory audit) as determined by the instructor.

#### **Challenge Examinations**

In lieu of registering for a course, a student may request a challenge examination. (Students who have received a grade in a class taken at NMT may not take a challenge exam in that course.) These exams allow students to receive credit or waive the requirement for a course by passing a comprehensive test of the course material.

Courses available through challenge exam are determined by department policy.

Permission must be granted by the instructor of the course. A challenge examination fee is charged (page 47). The form of the examination (written, oral, practical, combination, etc.) will be determined by the instructor. At the option of the student and instructor, the examination may be graded on either the standard or S/U basis, and the examination points earned will be equivalent to a final grade in the course. Some departments offer challenge exams on an S/U basis only.

Credit hours and grade points earned in this way are exactly equivalent to those earned through successful completion of that course. The following regulations will apply to all challenge examinations:

- Permission of the instructor of the course is required and the examination is given at a time of the instructor's choosing.
- Information as to the nature of the challenge examination will be made available to a student upon request.
- The student will be told the grade earned and has the right to decide whether the credit and grade will be entered on the transcript.
- If a student is registered for the course, the challenge exam must be taken during the first three weeks of the fall or spring semester so the student's schedule can be adjusted.

#### **Correspondence Courses**

A student's total registration per semester, including all courses taken in residence and by correspondence, must not exceed 13 credit hours without approval of the advisor and Graduate Dean. Any student who is enrolled for a correspondence course must report this fact in writing to the Dean of Graduate Studies before registering for classes and also must obtain the Dean's approval before enrolling for a correspondence course during a semester when enrolled at NMT. Correspondence courses in progress during any semester must be recorded on the student's program. Approval of enrollment in a correspondence course does not necessarily imply that transfer credit will be allowed. If transfer credit is desired, regular evaluation procedures must be observed; moreover, a final grade for the course must be reported officially to the Registrar not later than 30 days before the end of the semester during which credit is desired.

#### **Directed Study Courses**

Directed study courses (courses numbered 491 and 581) are not typically accepted to meet graduate requirements. To be included as part of a student's declaration of courses fulfilling degree requirements, directed study courses require the approval of the department chair in the major department, the chair of the department offering the course, the student's advisor, and the Graduate Dean unless the use of directed study is explicitly listed as applicable in the graduate student's degree program requirements.. Approval must be obtained before the student takes the course and recorded in the student's graduate file in the Center for Graduate Studies.

#### **Privacy of Information**

New Mexico Tech adheres to the provisions set forth by the **Family Educational Rights and Privacy Act** of 1974, as amended. Under the provision of this Act, the following policies apply:

- 1. If you are a currently enrolled student or former student, you may inspect your educational records by submitting an official request and obtaining an appointment to do so.
- You may challenge inaccuracies or misleading items. However, you may not challenge the fairness of a grade under this provision.
- 3. Your record is not released without your written consent except to NMT school officials with a legitimate educational interest. School officials are agents of the university in an administrative, supervisory, academic, research or support staff position; members of university committees, boards and/or councils; and persons under contract to the university to perform a specific task, such as an attorney or auditor. School officials have a legitimate educational interest in accessing or reviewing a student's educational records if they are:
  - Performing a task that is specified in his/her position description or contract
  - Performing a task related to a student's education or to student discipline
  - Providing a service or benefit relating to the student or student's family.
  - Maintaining safety and security on campus.
     Other exceptions are to comply with a judicial order, or in an emergency involving the health or safety of a student or other person.
- 4. When a record is released, the recipient is notified by NMT that the record may not be released to a third party.
- 5. With the exception of disclosures to academic personnel, a record is kept of disclosures of personally identifiable information for which the student has not given written consent.
- 6. Directory Information: NMT designates the following as directory information: name, student ID number, address, telephone number, dates of attendance, class, previous institution (s) attended, major field of study, awards and honors (includes honor roll), and degree(s) conferred (including dates). You have the right to withhold the disclosure of directory information. Any requests for such information from non-Tech persons or organizations will be refused. NMTwill honor your request to withhold directory information but cannot assume responsibility to contact you for

subsequent permission to release it. Regardless of the effect upon you, NMT assumes no liability for honoring your instructions that directory information be withheld.

For more information, contact the Office of the Registrar, Joseph A. Fidel Center, Room 285, 575.835.5133.

### **Changing Your Residency**

Requirements to establish New Mexico residency: If you are over 18 years of age, you may become a legal resident of New Mexico for tuition purposes by meeting each of the following requirements as defined by the New Mexico Higher Education Department.

#### A. Twelve month durational requirement.

A person must physically reside in New Mexico for the twelve consecutive months immediately preceding the term for which the resident classification is requested.

#### B. Financial independence requirement.

Only persons who are financially independent may establish residency apart from parents or guardians. A student cannot be approved for residency who is financially dependent upon his or her parents or legal guardians who are nonresidents of New Mexico. Dependency is always determined by the status of the student on their parent's or guardians previous year federal income tax form. If the student is shown to be dependent, they will not be considered financially independent or eligible for residency during the current year.

#### C. Written declaration of intent requirement.

The student or person must sign a written declaration of intent to relinquish residency in any other state and to establish it in New Mexico.

#### D. Overt acts requirement.

Overt acts are required to evidence support of the written declaration of intent to establish permanent residency in New Mexico. The required overt acts are evidence of any two of the following:

- if the applicant is financially dependent, a copy of the parent or guardians' previous year income tax showing the applicant as a dependent and the parent address as New Mexico; or
- a New Mexico high school transcript issued in the past year confirming attendance at a New Mexico public or private high school within the past twelve (12) months; or

- a transcript from an online high school showing a New Mexico address confirming attendance within the past twelve (12) months; or
- a New Mexico driver's license or ID card with an original date of issue or a renewal date issued prior to the application date for admission; or
- proof of payment of New Mexico state income tax for the previous year; or
- evidence of employment within the state of New Mexico; or
- New Mexico vehicle registration; or
- voter registration in New Mexico; or
- a bank account established in New Mexico prior to the application date for admission; or
- proof of residential property ownership in New Mexico; or
- · a rental agreement within New Mexico; or
- utility bills showing the applicant name and a New Mexico address; or
- other evidence which would reasonably support the individual's intent to establish and maintain New Mexico residency.

Any act considered inconsistent with being a New Mexico resident will cause the request for resident classification to be denied. As such, other relevant factors may be considered in addition to the items listed in this Section.

The Higher Education Department recognizes that there may be circumstances in which a student would not be able to fulfill the requirements of an overt act as listed in this section, such as: 1) individual is physically disabled and does not have a driver's license, or 2) individual is a convicted felon and therefore cannot vote, etc. In instances such as these, the institution will afford the student an opportunity to provide other documentary evidence or reasonable explanation which demonstrates that permanent residency in New Mexico has been established by the student.

All petitions for New Mexico residency are due on registration day and in no case later than the 21st day of the fall or spring semester.

You will not be entitled to any refund of tuition if you become a resident during a semester, summer session, or other term. Detailed information concerning residency requirements is available from the Registrar.

#### Student Use of NMT Facilities

Many NMT facilities are available for student use. In order to be eligible, a club or organization must be officially recognized by the Dean of Students, or designated representative and by the Student Association. Facilities may only be used for legal and otherwise legitimate purposes, and that use must not in any way hinder the academic mission of NMT. Further details regarding use of classrooms and other facilities may be found in the *New Mexico Tech Student Handbook*.

#### **Transfer Credits**

For graduate degrees, NMT accepts at most 12 academic credits from regionally accredited institutions of higher education. All credits will be evaluated and transferred on a course-by-course basis. Only courses at the 300 level and above with a grade of "B" or higher are eligible for transfer credit for graduate degrees Credit earned at any institution while a student is on academic or disciplinary suspension from any institution will not be accepted at NMT. Grades earned at other universities are not transferred to NMT.

### Withdrawing from the University

Students leaving New Mexico Tech, including those who are graduating or transferring to another institution, must withdraw from the university.

Before withdrawing from the university, you must

- 1) check in all NMT property (laboratory keys, gymnasium equipment, etc.);
- 2) settle or make arrangements for all financial obligations to the university;
- 3) complete a Statement of Withdrawal form (Forms are available at the Graduate Office);
- 4) complete an exit interview with the Financial Aid Office; and
- 5) notify the Office of the Registrar if you have preregistered for classes offered the next semester.

If you withdraw during the semester, you must complete the above steps and:

6) withdraw from all classes (see page 51).

If you do not complete these steps, your transcript and/or diploma may be withheld.

A student may petition for Withdrawal without Prejudice under extremely unusual circumstances, such as serious illness or a death in the student's immediate family (see page 52 for details).

#### **Additional Policies**

Students who enroll at New Mexico Tech should do so with the realization that they are presumed to be serious in purpose, and they are expected to conduct themselves as good citizens of the college community. An effective guardianship of the health, general safety, and welfare of all students must be maintained.

The final responsibility for the accomplishment of these purposes must rest upon the administration and faculty of the institution, who may, therefore, prescribe certain rules and enforcement procedures for guidance toward these ends. Information concerning such rules and additional procedures is contained in the *New Mexico Tech Student Handbook* and in supplementary bulletins, which may be published from time to time.

New Mexico Tech is committed to the full support of the constitutional rights of its students, including due process in student disciplinary matters. Detailed procedures designed to safeguard students' rights and to guarantee fair and impartial treatment of any disciplinary cases are published in the *New Mexico Tech Student Handbook*. Methods developed to provide due process in student disciplinary matters are based on the 1967 joint recommendations of the American Association of University Professors, the National Association of Students, and the National Association of Student Personnel Administrators, conforming to Title IX—Educational Amendments of 1972.

Continued enrollment in New Mexico Tech is dependent upon the maintenance of satisfactory grades and conformity to the rules of NM Tech.

Check Your *Student Handbook* for General Campus Rules and Policies on:

- Discipline
- Drug and Alcohol
- Grievance
- Privacy Rights
- Ouiet
- Vehicles

# Academic Issues & Appeal Policy and Procedure

Occasionally, students may have reason to disagree with an academic decision or feel that they have a legitimate concern about an instructor or staff member at NMT. Students should be aware that the Dean of Graduate Studies is available to discuss and advise on any troublesome matter of academic concern and frequently helps to expedite resolution of such matters.

The following procedure applies equally to grades or any other academic issues:

- The student first should discuss the issue, orally or in writing, with the instructor or staff member.
- If the student is not satisfied, he or she should then consult with the instructor's department chair or the staff member's supervisor. If the issue or concerns is with the department chair, the student should meet with the Dean of Graduate Studies. Every effort should be made to resolve the issues at this level.
- If no satisfactory resolution has yet been reached, the student should then present the issue or concern to the Vice President for Academic Affairs or his/her designated representative.
- Non-academic issues must also be brought to the Dean of Graduate Studies.
- Sexual harassment issues must be brought to the Director of Affirmative Action and Compliance.

### **Responsible Conduct for Graduate Students**

New Mexico Tech's Academic Honesty Policy and Guide to Conduct and Citizenship for Graduate Students

#### Responsible Academic Conduct Policies and Procedures

- 1.0 Academic Honesty Policy for Graduate Students
- 2.0 Academic Dishonesty and Research Misconduct
- 3.0 Fostering Academic Honesty and Research Integrity
- 4.0 Dealing with Incidents of Academic Dishonesty or Research Misconduct
- 5.0 Students' Right to Appeal a Penalty Action
- 6.0 Academic and Research Discipline Policy and Procedures
- 7.0 Students' Right to Appeal an Academic and Research Disciplinary Action
- 8.0 Records of Penalty Actions, Academic Disciplinary Actions and Hearings

#### Responsible Non-Academic Conduct Policies and Procedures

- 9.0 New Mexico Tech's Guide to Conduct and Citizenship
- 10.0 Citizenship Misconduct/Causes for Disciplinary Measures
- 11.0 Non-Academic Discipline Policy and Procedures
- 12.0 Non-Academic Disciplinary Action
- 13.0 Students' Right to Appeal a Non-Academic Disciplinary Action
- 14.0 Records of Non-Academic Disciplinary Actions and Hearings

#### 1.0 Academic Honesty Policy for Graduate Students

#### 1.1 Introduction

New Mexico Tech has an outstanding academic reputation and excels as a teaching and research university specializing in areas of science, engineering, and related fields. This reputation is contingent on an environment of academic honesty and integrity.

Indeed, New Mexico Tech's Institutional Values statement recognizes integrity as a core value along with creativity, excellence, collegiality and citizenship, service, leadership, and Commitment to Economic Prosperity and Technological Development. "Integrity is honored as a fundamental value at New Mexico Tech. Dishonesty, cheating, and plagiarism have no place in a respected institution of higher education. But real integrity goes further than these negatives. Integrity means having the courage to defend the truth, to act fairly and honestly in all our endeavors, and to be responsible members of the community." (See page 12).

Academic dishonesty and research misconduct is therefore unacceptable and will not be tolerated at this Institute.

- **1.1.1** In the following, the role of the Dean of Graduate Studies pertains to cases involving incidents of academic dishonesty by Graduate students.
- **1.1.2** For cases involving incidents of academic dishonesty by Undergraduate students, see the Undergraduate Catalog.
- 1.1.3 The term day/days/number of days shall mean the number of academic days within an academic semester or summer session. If the procedure of the incident occurs or continues when the final grades are due or after the end of the academic semester or academic session, the Dean of Graduate Studies will determine

- whether to proceed on non-academic session business days of the Institute or to continue the procedure when the next semester or session begins. Concerning this, the Dean of Graduate Studies will take into consideration requests by the student charged.
- 1.1.4 Research Misconduct can occur as a result of academic research or Sponsored Research (Externally Funded Research). Academic Research Misconduct will be handled following the same policies as the handling of academic dishonesty, with the research supervisor reporting acts of research misconduct as described for instructors reporting academic dishonesty. Sponsored research misconduct is governed by the Policy to Assure the Integrity of Research, which can be found on the following webpage: <a href="http://www.nmt.edu/research-policies-a-forms">http://www.nmt.edu/research-policies-a-forms</a>.
- 1.1.5 The use of the term Academic Dishonesty serves to include the term Academic Research Misconduct.
- **1.1.6** The use of the term Academic Honesty serves to include the term Research Integrity.
- **1.1.7** The use of the term instructor serves to include the term research supervisor.
- **1.1.8** The use of the term Sponsored Research or Externally Funded Research refers to research and development activities of the institute that are separately budgeted and accounted for on a specific project basis and research cost sharing.

#### 2.0 Academic Dishonesty and Academic Research Misconduct

- 2.1 Academic Dishonesty is defined as an act of academic fraud. It could be any of the following:
  - **2.1.1 cheating:** the use of unauthorized material during a test, or the act of copying from another student;
  - **2.1.2 plagiarism:** the unauthorized use or use without proper citation of either someone's published work, unpublished material in someone else's computer files or material derived from the Internet;
  - 2.1.3 theft: any form of unauthorized procurement of academic documents, e.g., exams, student reports;
  - **2.1.4 falsification:** any form of illegal alteration of academic documents for any purpose including improper alteration of experimental data obtained in the laboratory;
  - **2.1.5 impersonation:** the act of permitting another person to substitute for oneself at an examination;
  - **2.1.6 obstruction:** interference with or sabotage of the work of any other person through vandalism or theft;
  - **2.1.7 assistance:** the act of helping another to commit fraud in any of the above-mentioned ways.
- 2.2 Academic Research Misconduct is defined as a violation of scholarly conduct codes or of unethical behavior in research. In addition to forms of academic fraud, Academic Research Misconduct could be any of the following:
  - **2.2.1 inaccurate listing of authorship:** the act of listing as an author or co-author those who have not made substantial contributions to the research or listing an author or co-author without their consent or the act of not naming as an author or co-author someone who is a major contributor;
  - **2.2.2 failure to disclose a conflict of interest:** such as failing to disclose being paid by an organization that will benefit from a research project;
  - **2.2.3 violation of ethical standards related to human and animal testing**: e.g., experimentation on human subjects without informed consent (All human/animal experiments must be reviewed and preapproved by NMT's Institutional Review Board);
  - **2.2.4 fabrication of data:** improper alteration of experimental data obtained in the laboratory or any scientific or research experiment;
  - **2.2.5 failure to report:** failure to report incidents of research or scientific misconduct;
  - **2.2.6 providing inaccurate assessment of research:** such as exaggerating or denigrating contributions by those involved in peer review.

#### 2.3 Sponsored Research (Externally Funded Research)

Research Misconduct in Externally Funded Research is governed by the "Policy to Assure the Integrity of Research" which can be found at

http://www.nmt.edu/research-policies-a-forms.

In the case of Research Misconduct in Externally Funded Research, the procedures of the above policy, the "Policy to Assure the Integrity of Research" must be followed.

The following is taken directly from page 6 of the "Policy to Assure the Integrity of Research":

All employees or individuals associated with New Mexico Tech should report observed, suspected, or apparent misconduct in science to the Vice President for Research & Economic Development. If an individual is unsure whether a suspected incident falls within the definition of scientific misconduct, he or she may call the Vice President for Research & Economic Development to discuss the suspected misconduct informally. If the circumstances described by the individual do not meet the definition of misconduct, the Vice President will refer the individual or allegation to other offices or officials with responsibility for resolving the problem.

At any time, an employee may have confidential discussions and consultations about concerns of possible research misconduct with the Vice President for Research & Economic Development and will be counseled about appropriate procedures for reporting allegations, which may be made orally and anonymously.

The following is considered "research misconduct" under the policy that governs externally funded research, and is taken directly from pages 1 and 2 of the "Policy to Assure the Integrity of Research":

- 1. Violation of any criminal or civil law in obtaining, analyzing or reporting data.
- 2. Plagiarism: The act of taking the written or oral research ideas or results from another and presenting them as one's own.
- 3. Intentional falsification or fabrication of data or results:
  - a. Forging Data: Inventing some or all of the reported research data, or reporting experiments never performed.
  - b. "Cooking" Data: Retaining only those results that fit the hypothesis.
  - c. "Trimming" Data: The unreasonable smoothing of irregularities to make the data look extremely accurate and precise.
- 4. Applying for federal funding while under federal suspension or debarment, or knowingly utilizing as a co-principal investigator, investigator, technician, or consultant a person suspended or debarred.
- 5. Failure to maintain a record of primary data with the intent to deceive, e.g. destroying laboratory notebooks, survey forms, microscope reference slides, computer or other machine printouts with the intent to deceive.
- 6. Failure to report known or suspected acts of misconduct on the part of others, including the act of knowingly withholding or destroying evidence crucial in an investigation of misconduct.
- 7. Abuse of confidentiality when gathering or reporting data, e.g., releasing data gathered during privileged communication.
- 8. Use of honorary authorships, without the person's consent, and/or with the intent to deceive.
- 9. Without being involved with the research in question, making a demand to be listed as an author on a researcher's publication, solely because the person making the demand is in a position of authority over the researcher.

#### 3.0 Fostering Academic Honesty and Research Integrity

**3.1** The need to foster academic honesty and research integrity imposes a nexus of responsibilities on the Institute, its students and faculty.

**The Institute:** The Institute's responsibility is to publish relevant policies, ensure that all such publications are consistent with each other, and implement the policies in a consistent manner.

**Students:** Each student's responsibility is to understand for every academic assignment what is expected from him/her and what would indicate academic dishonesty.

**Faculty:** It is the responsibility of the instructor of a course to clearly articulate any special case of academic dishonesty that is relevant to that course but not covered in Section 2.0.

#### 3.2 The following recommendations are intended to help in discharging those responsibilities:

#### 3.2.1 Recommendations for the Institute

- Compile useful articles on academic honesty and plagiarism and publish them on the Web.
- Ensure that any student who is engaged in learning, in teaching, and in research receive guidance about relevant ethical issues.

#### 3.2.2 Recommendations for students

- Attend all classes; in case a class is missed, talk to the instructor and find out about assignments given and topics covered.
- Time management is crucial. When study time is planned, the possibility of last-minute panic is minimized along with the consequent temptation to take unethical shortcuts.
- Unless explicitly prohibited in a course, sharing and discussing ideas with other students is encouraged as it can facilitate learning. But make sure that you do not share what you turn in for individual assignments.
- Do not keep open books or course material in close proximity to you while you take a test unless it is explicitly allowed.
- If you are experiencing undue stress, you have many resources available on campus for help and support-your academic advisor, your department chair, the Center for Student Success, the Counseling and Disabilities Office, the Center for Graduate Studies, and the Office of Academic Affairs. Seek help and support rather than resorting to unethical behavior.
- The Center for Graduate Studies will provide education and training in the responsible conduct of research to all students supported on research grants. Relevant websites on this subject include:

NMT's research policy and forms at

http://www.nmt.edu/research-policies-a-forms-research-and-econ-dev;

NSF's policy at <a href="http://www.nsf.gov/oig/resmisreg.pdf">http://www.nsf.gov/oig/resmisreg.pdf</a>;

and NIH's policy at <a href="http://grants.nih.gov/grants/research">http://grants.nih.gov/grants/research</a> integrity/.

• Students should be aware that the Dean of Graduate Studies is available for graduate students and the Associate Vice President for Academic Affairs is available for all students to discuss and advise on any troublesome matter of academic concern; they help to expedite resolution of such matters.

#### 3.2.3 Recommendations for faculty

- Mention this section of the catalog in your syllabus and in your introductory lecture.
- In the syllabus you hand out in the beginning of the course, list any special policies relevant to your course. For example, you could clarify what you mean by a restricted use of a resource like the Internet; you could set guidelines for non- standard assignments like group work, field trips, and ungraded papers. Furthermore, if you could include this syllabus in a Web page for the course, it could benefit students as well as other faculty.

#### 4.0 Dealing with Incidents of Academic Dishonesty or Academic Research Misconduct

#### 4.1 The Role of the Instructor in the Bringing of Charges

If a dishonest action is discovered by, or brought to the attention of, a teaching assistant assigned to a course, he/she shall play the role of instructor as described below only if explicitly authorized by the faculty supervisor of that course; otherwise, the teaching assistant shall immediately convey the specific details to the faculty supervisor who will fill that role. The department chair or his/her designated representative shall substitute for an absent faculty supervisor.

#### 4.2 Determination of the Act of Academic Dishonesty by the Instructor

#### 4.2.1 When a case of academic dishonesty is detected, it is the instructor's responsibility to:

- (a) distinguish between a minor infraction and a major one, and
- (b) to take action appropriate to this judgment of severity.

For example, a missed reference in an otherwise well-cited paper should be treated as carelessness; one unattributed remark in an ungraded paper should be considered minor. On the other hand, copying a substantial part of a term paper off a document available on the Internet should be considered a major violation; falsification of laboratory work by a student engaged in research should also be considered major.

Minor infractions repeated in spite of warnings may be treated as major.

#### 4.3 Classes of Action Available to Instructor

# Four classes of actions are available to the instructor, one without a penalty, two that are Grade Penalty Actions, and one Research Penalty Action.

Throughout this policy, Penalty Action will refer to either a Grade Penalty Action or a Research Penalty Action as appropriate.

#### The instructor may:

4.3.1 only warn, i.e., issue a warning to the student(s) without any penalty in grades or research.

Or the instructor may impose one of the following Grade Penalty Actions:

- 4.3.2 only penalize the assignment in question, e.g., decrease the student's grades for that academic work (perhaps a zero for the entire assignment or a part thereof) and/or ask the student to re-do the assignment;
- 4.3.3 penalize the course, i.e., directly change the course grade, e.g., drop a letter grade or assign an 'F' for the course.

Or in the case of academic research, the research supervisor may impose a Research Penalty Action:

- 4.3.4 terminate research involvement, i.e., remove the student from the research project, which may include termination of employment.
- 4.4 Bringing of Charges -- Procedure by Instructor when Academic Dishonesty is Detected:
  - 4.4.1 The instructor must make every effort to discuss with the student(s) the violation detected and any Penalty Action being imposed.

#### 4.4.2 Bringing of Charges Statement

- If a Penalty Action is imposed, the instructor must write in a memo the Bringing of Charges Statement -- to the Dean of Graduate Studies.
- If the dishonesty does not involve any course, e.g., when a student employed under an externally-funded research grant falsifies laboratory data, the faculty research supervisor must comply with the "Policy to Assure the Integrity of Research."
- If more than one student is involved in the act of dishonesty, the instructor must submit a separate Bringing of Charges statement (memo) for each student.
- Notifications (Bringing of Charges statement) from the Instructor to the Dean of Graduate Studies must be sent within ten days of the discovery of the dishonesty.

#### The Bringing of Charges statement must include the following information:

- the grade for the course has been affected partly or wholly by an act of academic dishonesty,
- the nature of the violation and its severity,
- · details as to time, place, and persons involved,
- any available supporting evidence,
- the specific Penalty Action imposed.

#### Evidence of Act of Dishonesty Provided with Bringing of Charges Statement

The instructor should provide with the memo <u>evidence of the violation</u>, e.g., copies of assignments exhibiting plagiarism, a witness in case of cheating during an in-class exam, a hard copy of a plagiarized Web page.

#### Further Recommendations in the Bringing of Charges Statement

Further, the instructor may recommend in the Bringing of Charges Statement that the Dean of Graduate Studies should impose an appropriate disciplinary action on the student. The term disciplinary action refers to a penalty listed in section "6.5 Academic Disciplinary Action."

#### 4.5 Response Procedure by Dean of Graduate Studies:

- The Dean of Graduate Studies' responsibility is to respond to the bringing of charges, to review the evidence provided by the instructor and evidence the student might provide, and to make a determination on the charges.
- In addition, the Dean of Graduate Studies' responsibility is to decide on the imposition of disciplinary action, i.e., whether or not disciplinary action should be imposed and, if so, which specific disciplinary action penalty (listed in section 6.5) is appropriate.
- The Dean of Graduate Studies will follow the procedures described under the Dean of Graduate Studies' Investigation (section 6.4) with the following additions and clarifications:
- **4.5.1** On receiving a notification of dishonesty, the Dean of Graduate Studies shall look up the student's record of past incidents of dishonesty.
- **4.5.2** The Dean of Graduate Studies shall convey in writing to the student involved within ten days after the Bringing of Charges (see 6.3) both the specific charge made by the instructor and the Penalty Action imposed, inform the student about the provisions of this policy, and give him/her an opportunity to discuss the incident with the Dean of Graduate Studies.

- **4.5.3** The Dean of Graduate Studies shall consider requests from the student for additional time to gather evidence.
- **4.5.4** If the current incident has been judged minor by the instructor but the student has a past record of dishonesty, the Dean of Graduate Studies shall determine whether or not this time the infraction shall be treated as major. Based on this determination, the Dean of Graduate Studies may elect to impose disciplinary action.
- 4.5.5 If the current incident has been judged major by the instructor, the Dean of Graduate Studies shall decide on the imposition of the disciplinary action after considering the instructor's recommendation, the evidence presented, the student's account of the case, and any other fact the Dean of Graduate Studies finds pertinent. The absence of past incidents shall not be construed as a dilution of the seriousness of a major violation. For example, a student who has falsified research results should not be treated leniently solely because it is his/her first incident of academic dishonesty.
- **4.5.6** The Dean of Graduate Studies shall notify the student and the instructor in writing of the Dean of Graduate Studies' determination of the academic dishonesty incident, the concurrence or non-concurrence with the Penalty Action and whether or not disciplinary action is being imposed within twenty days of the receipt of the Bringing of Charges statement or ten days from the end of any additional time period granted to the student.
  - If the Dean of Graduate Studies concurs that the charges brought are substantiated, the Dean of Graduate Studies will also notify the student's academic advisor.
  - Notifications of incidents of academic dishonesty from instructors, the correspondence from the Dean of Graduate Studies, and the outcomes of the incidents shall remain in the students' files in the Office of Academic Affairs in accordance with section "8.0 Records of Penalty Actions, Academic Disciplinary Actions and Hearings." The Dean of Graduate Studies may opt to keep a copy of the files in the Center for Graduate Studies in accordance with section 8.0.
  - Annually, early in the Fall semester, the Dean of Graduate Studies shall present to the Faculty Senate the number of instances of academic dishonesty reported along with their breakdown by cases (4.3.2, 4.3.3, 4.4.4) of instructor notifications (Bringing of Charges), Penalty Action imposed, instructor recommendations of disciplinary action, categories of infractions, disciplinary actions imposed, appeals, and their outcomes. In addition, the Dean of Graduate Studies shall communicate any observations from the President regarding conflicts of this policy with any other so that conflicts may be rectified.

#### 5.0 Students' Right to Appeal a Penalty Action

#### 5.1 Requesting a Hearing to Appeal a Penalty Action

Upon request by the student charged and subjected to a Penalty Action, the procedures of the Academic Discipline Policy described in Section 7.0 and modified in 5.2 below must be followed.

#### The student may request a hearing before the Student Discipline Committee:

- the request must be made in writing to the Dean of Graduate Studies;
- a graduate student must send a copy of the request to the President of the Graduate Student Association;
- the request must be made within ten days of the receipt of the notification from the Dean of Graduate Studies.

#### 5.2 Hearing Procedure

The procedures listed under Hearing (Section 7.3) shall apply with the following additions and exclusions.

#### **Additions**

- The Dean of Graduate Studies shall submit the instructor notification (Bringing of Charges memo/statement)
  plus any previous records of academic dishonesty of the student as evidence before the Student Discipline
  Committee.
- The instructor who brought charges of dishonesty will act as a witness.
- If the committee decides that a grade penalty should be reversed, the instructor shall be required to submit a fresh grade computed by removing the penalty.

#### **Exclusions**

• If no disciplinary action is involved, i.e., only a Penalty Action is being appealed, legal counsel will not be permitted and no recording will be made of the hearing.

#### 5.3 Instructor Appeal of the Student Discipline Committee Decision on Penalty Action

The decision of the Student Discipline Committee may be appealed as described in section "7.4 Appeal of the Student Discipline Committee Decision" with the following additions and exclusions.

#### Additions

- The instructor who brought charges of academic dishonesty that resulted in only a Grade Penalty Action may appeal the decision of the Student Discipline Committee only if the decision was based on a tie.
- The Vice President for Academic Affairs shall communicate the final outcome of the appeal to the student, the Dean of Graduate Studies, and the instructor who brought charges of academic dishonesty.

#### 5.4 Composition of the Student Discipline Committee

The composition of the Student Discipline Committee for cases of academic dishonesty by graduate students shall be as described in section "7.2 Student Discipline Committee."

### **Discipline Policies for Graduate Students**

#### 6.0 Academic Discipline Policy and Procedures

**6.1** New Mexico Tech's Academic Discipline Policy has two primary purposes:

First, it is intended to ensure that the student charged with academic honesty infractions is granted due process of law consistent with the principles of the United States Constitution. Due process means a fundamentally fair procedure based upon reasonable principles impartially applied.

Second, the policy is intended to educate the student in question regarding the standards of conduct expected at New Mexico Tech and throughout society as a whole. The process is not intended to mimic a genuine adversarial court proceeding but is based upon sound judicial practices.

Students violating Academic Honesty Policy are subject, in addition to a Penalty Action, to academic disciplinary action in accordance with the procedures listed below.

#### 6.2 Bringing of Charges

Charges of academic dishonesty or research misconduct must be in writing, must specify the nature of the violation, and must give details as to time, place, and persons involved (see 4.4). This statement must be given to the Dean of Graduate Studies within ten days of the discovery of the incident(s) in question.

If more than one student is involved in the violation, the instructor must submit a separate memo for each student.

#### 6.3 Notification of Charges

Students charged with violations of Academic Honesty Policy must be notified in writing via email and/or campus mail by Dean of Graduate Studies of the charge <u>within ten days of the bringing of charges</u>. This notice must contain the particulars specified in the written Bringing of Charges statement, as outlined in 4.4, and notification of where to find the Academic Honesty Policy in the New Mexico Tech Catalog.

#### 6.4 The Dean of Graduate Studies' Investigation

The Dean of Graduate Studies will investigate the charges and may impose disciplinary penalties as stated in the section "6.5 Academic Disciplinary Action." The action taken shall constitute the Dean of Graduate Studies' decision. Regardless of the action taken by the Dean of Graduate Studies, the student has the right of hearing and appeal.

#### 6.5 Academic Disciplinary Action

- **6.5.1** A student who is found to have violated the Academic Honesty Policy may be subject to one or more of the following disciplinary action penalties in addition to a Penalty Action:
  - Academic disciplinary probation, not to exceed one calendar year (recorded in the student's file in the Office of Academic Affairs)
  - Interim suspension (see "6.6 Interim Suspension")
  - Academic disciplinary suspension, not to exceed one calendar year (recorded in the student's permanent file in the Office of the Registrar and noted on the student's transcript)
  - Permanent dismissal (recorded in the student's permanent file in the Office of the Registrar and noted on the student's transcript).
  - Other disciplinary actions deemed appropriate to the specific case
- **6.5.2** If none of the above penalties is deemed appropriate, a student may be given an oral or written warning or statement that no disciplinary action is warranted.
- **6.5.3** The decision whether or not to take action shall belong to the Dean of Graduate Studies.

#### 6.6 Interim Suspension

At times, on the basis of his/her investigation into charges of violations of the Academic Honesty Policy, the Dean of Graduate Studies may conclude that it is necessary to suspend a student immediately, prior to a hearing on the matter. This may be the case when the student in question is believed to be dangerous to himself or herself, to others, or to property. Under such circumstances, the Dean of Graduate Studies or in his/her absence, the Vice President for Academic Affairs, Associate Vice President for Academic Affairs or other person designated by the Institute President, may impose an interim suspension pending written notice with a hearing to be set at a later date.

An interim suspension may not be imposed unless it is based upon facts that show that the student's continued presence on campus may constitute a danger to the student, to others, or to property.

An interim suspension may not be based upon mere suspicion of guilt. Any student suspended on an interim basis has the right to a hearing before the Student Discipline Committee. The student suspended on an interim basis must present

a written request for a hearing to the Dean of Graduate Studies, within five days of the effective date of the interim suspension. The hearing must be held within five days of the suspended student's request for a hearing unless the student charged requests a delay, in which case the times specified in the following section shall apply.

The interim suspension shall terminate when the hearing is held. The Dean of Graduate Studies may impose regular disciplinary penalties at this point in the proceedings.

#### 7.0 Students' Right to Appeal an Academic Disciplinary Action

# 7.1 Upon request by the student charged and subjected to disciplinary action, the case will be heard by the Student Discipline Committee:

- the request must be made in writing to the Dean of Graduate Studies;
- a graduate student must send a copy of the request to President of the Graduate Student Association;
- the request must be made within ten days of the receipt of the notification from the Dean of Graduate Studies.

#### 7.2 Student Discipline Committee

- **7.2.1** The Student Discipline Committee shall hear cases of students charged with violations of the Academic Honesty Policy and subject to academic disciplinary penalties if requested by the student charged as outlined in section 7.1. The committee will then make its decision following a hearing on the matter.
- **7.2.2** The Student Discipline Committee when a graduate student is charged shall be composed of:
  - One member and one alternate of the Supreme Court of the Student Government Association (or other members of the Student Government Association if Supreme Court members are unavailable) as designated by the President of the Student Government Association
  - Two members of the Graduate Student Association and one alternate as designated by the President of the Graduate Student Association
  - Three members of the Faculty Senate and two alternates (not members of the administration other than chairpersons of academic departments) elected by the Faculty Senate Student Discipline Committee
- **7.2.3** Either party to the dispute may disqualify one member of the Student Discipline Committee. Members may also disqualify themselves and should do so if they are aware of any reason they would not be able to render a fair and impartial decision.
- **7.2.4** The Student Discipline Committee shall establish its own procedures and shall select its own Chairperson, except that a quorum shall consist of all six members of the committee. (In the event that one or more committee members are unable to meet at times consistent with the provisions of previous sections titled Interim Suspension and Hearings, an alternate member shall serve.)
- **7.2.5** The Chairperson must vote on each and every issue. In case of a tie vote on the charges, the student shall be found innocent, and in case of a tie vote on the discipline imposed, the less serious disciplinary action shall be recommended to the Dean of Graduate Studies.

#### 7.3 Hearing

The hearing is not intended to be a full-fledged adversarial proceeding: it is intended to be a fair hearing with ample opportunity for both parties (the student and the Institute) to present the facts. The Institute will be represented by the Dean of Graduate Studies or her/his designated representative.

#### The following procedures shall apply:

- **7.3.1** Both parties will be notified of the date of the hearing by the President of the Graduate Student Association at least ten days prior to the hearing (except in the case of interim suspension). In exceptional cases the Student Discipline Committee may choose to hold the hearing at an earlier time, but only with the express agreement of both parties.
- **7.3.2** Both parties shall be permitted to inspect, at least 24 hours in advance of the hearing, any documentary evidence that the other party intends to submit at the hearing. Both parties shall submit the documentary evidence with a list of witnesses who will testify at the hearing to the President of the Graduate Student Association after receiving notification of the hearing date.
- **7.3.3** The party who is charged with violating Academic Honesty Policy is responsible for presenting his or her case; advisors or support persons (including attorneys) of either party can be present but are not permitted to present arguments or evidence in the hearing.
- **7.3.4** Both parties may question any witness who testifies at the hearing.
- **7.3.5** A recording will be made of the hearing. A more formal record by a court reporter may be arranged by either party at their own expense.
- **7.3.6** The hearing shall be private if so requested by the student charged.
- **7.3.7** The student charged is not required to testify in his/her own defense and failure to testify shall not be held against the student.
- **7.3.8** The Student Discipline Committee will base its findings and decision solely on the evidence presented at the hearing.
- **7.3.9** The Student Discipline Committee shall give a written copy of its findings and decision to the parties within a reasonable amount of time. A copy of the findings and decision will also be kept on file in the Office of Academic Affairs.
- 7.3.10 The Student Discipline Committee may affirm, reverse or modify the decision of the Dean of Graduate Studies. The decision of the Student Discipline Committee shall be final unless appealed and reversed or modified.

#### 7.4 Appeal of Student Discipline Committee Decision

Either the student charged or the Dean of Graduate Studies may appeal the decision of the Student Discipline

Committee. This appeal, which must be in writing, will be sent to the Vice President for Academic Affairs of the Institute within ten days of the date of the Student Discipline Committees written decision.

The Vice President for Academic Affairs' review shall typically be limited to a review of the record made before the Student Discipline Committee, including all documentary evidence, if any, admitted. However, the Vice President for Academic Affairs may allow such additional testimony and/or documentary evidence to be presented to him/her as he/she may, at his/her sole discretion, determine necessary in order to clarify the facts and/or the respective position of the parties. The Vice President for Academic Affairs may recommend to the President of the Institute affirmation, reversal, or modification of the Student Discipline Committee's decision. The President may affirm, reverse, or modify the Student Discipline Committee's decision.

Following this, the decision of the President shall be binding. Should the President be a party to the dispute, a person selected by the Regents shall perform the duties assigned to the President. The decision on the appeal shall be returned in a timely manner.

#### 8.0 Records of Penalty Actions, Academic Disciplinary Actions and Hearings

#### 8.1 Record of Penalty Actions, Academic Disciplinary Actions and Hearings will be kept as follows:

- **8.1.1** Records of violations of Academic Honesty Policy that result in a Penalty Action or academic disciplinary action taken shall be kept by the Office of Academic Affairs for 10 years after the date of action taken. The Dean of Graduate Studies may opt to keep a copy of the files in the Center for Graduate Studies for 10 years.
- **8.1.2** A record of academic disciplinary suspension will remain in the student's permanent file in the Office of the Registrar and will be noted on the student's academic transcript.
- **8.1.3** A record of permanent dismissal will remain in the student's permanent file in the Office of the Registrar and will be noted on the student's transcript.
- **8.1.4** Any student may examine his or her own file and may request that records of academic dishonesty or research misconduct including any disciplinary action be removed and destroyed. Such requests will be reviewed by the Dean of Graduate Studies and must be honored if the relevant period specified in paragraph 8.1.1 above has expired.
- **8.1.5** If a New Mexico Tech undergraduate student applies to a graduate program at New Mexico Tech, the student's application and graduate record will include only records of violations that are included on the student's academic transcript. This is the same access that any graduate program, undergraduate program or place of employment will have when transcripts are required.

#### 9.0 New Mexico Tech's Guide to Conduct and Citizenship

#### 9.1 Statement of Policy

New Mexico Tech's primary purpose is education, which includes teaching, research, discussion, learning, and service. An atmosphere of free and open inquiry is essential to the pursuit of education. Tech seeks to protect academic freedom and build on individual responsibility to create and maintain an academic atmosphere that is a purposeful, just, open, disciplined, and caring community.

#### 9.2 Terms

The following selected terms are defined in an effort to facilitate a more thorough understanding of New Mexico Tech's Guide to Conduct and Citizenship. This list is not intended to be a complete list of all the terms referenced in the guide that might require interpretation or clarification. The Dean of Graduate Studies shall make the final determination on the definition of any term found in the New Mexico Tech's Guide to Conduct and Citizenship.

- **9.2.1** Accused student any student accused of violating The Student Code.
- **9.2.2 Administrative hearing officer** a University staff member who is authorized to determine the appropriate resolution of an alleged violation of The Student Code, and/or to impose sanctions or affect other remedies as appropriate. Subject to the provision in this code, and administrative hearing officer is vested with the authority to, among other duties such as:

Investigate a complaint or an alleged violation of The Student Code

Decline to pursue a complaint

Refer identified disputants to mediation and other appropriate resources

Establish charges against a student

Approve an administrative agreement developed with an accused student

Conduct an administrative hearing

Impose sanctions

Approve sanctions recommended by another Disciplinary Committee

Chair and/or advise a hearing or peer board

Conduct and appellate review

- **9.2.3 Appeal** a request for review of a case or concern to New Mexico Tech personnel; person to appeal to and procedures are specified in the catalog.
- **9.2.4** Complainant or Complaining Party any person who submits a charge alleging that a student violated The Student Code. When a student believes that s/he has been a victim of another student's misconduct, the student who believes s/he has been a victim will have the same rights under The Student Code as are provided to the complainant, even if another member of the University community submitted the charge itself.
- **9.2.5 Controlled Property** locations not owned by New Mexico Tech but which the Institute has been given authority to manage.
- 9.2.6 Day/Days/Number of Days The term day/days/number of days shall mean the number of academic days within an academic semester or summer session. If the procedure of the incident occurs or continues when the final grades are due or after the end of the academic semester or academic session, the Dean of Graduate Studies will determine whether to proceed on non-academic session business days of the Institute or to continue the procedure when the next semester or session begins. Concerning this, the Dean of Graduate Studies will take into consideration requests by the student charged.
- **9.2.7 Designee** refers to a staff or faculty member who has responsibility for implementing the student conduct process or administering the student conduct system, in part or in whole.
- **9.2.8 Dean of Graduate Studies or Dean** the person, designated by the President to be responsible for the overall coordination of the University graduate student conduct system, including the development of policies, procedures, and education and training programs. The Dean of Graduate Studies may serve as an administrative hearing officer.
- **9.2.9 Disciplinary Action** reprimanding students who fail to abide by the New Mexico Tech's performance standards, policies or rules.
- 9.2.10 Disciplinary Committee one or more members of the University community authorized by the Dean of Graduate Studies to determine whether a student has violated The Student Code and to impose sanctions as warranted.
- **9.2.11 Due process** a fundamentally fair procedure based upon reasonable principles impartially applied.
- **9.2.12 Hearing** is a formal meeting where a student who has been reported to violate a University policy presents testimony and arguments to the Dean of Graduate Studies or designee.
- **9.2.13 Function** activities and events that are sponsored by one or many departments at New Mexico Tech.
- **9.2.14 Institute** means New Mexico Tech.
- **9.2.15** May is used in the permissive sense.
- **9.2.16 Policy** the written regulations, standards, and student conduct expectations adopted by the University and found in, but not limited to, The Student Code; The On-Campus Housing Contract; the Policy on Alcohol and Other Drugs, graduate and undergraduate catalogs; and other publicized University notices.
- 9.2.17 Shall and Will are used in the imperative sense.
- **9.2.18 Student** any person admitted, registered, enrolled, or attending any University course; any person admitted to the University who is on University premises or University-related premises for any purpose pertaining to his or her registration or enrollment.
- **9.2.19 Student Conduct File** the printed/written file which may include but is not limited to incident report(s), correspondence, academic transcript, witness statements, and student conduct history.
- **9.2.20 Student organization** any association or group of persons that has complied with the formal requirements for University recognition.
- **9.2.21 Support person** any person who accompanies an accused student, a complainant, or a victim to an administrative hearing for the limited purpose of providing support and guidance. A support person may not directly address the Disciplinary Committee, question witnesses, or otherwise actively participate in the hearing process.
- **9.2.22 Unauthorized entry** gaining entry to a controlled property without proper permission from the University.
- **9.2.23** University New Mexico Tech.
- **9.2.24 University property** includes all land, buildings, facilities, and other property in the possession of or owned, used, or controlled by the University, either solely or in conjunction with another entity.

#### 9.3 Student Code of Conduct (The Student Code)

The **Student Code of Conduct** (also called The Student Code) attempts to clarify the types of conduct that shall be considered to affect adversely New Mexico Tech's educational function.

New Mexico Tech will not allow any conduct to disrupt community living on campus or to interfere with the rights of others to pursue their education, perform their duties and responsibilities, or participate in New Mexico Tech activities. Any conduct that does interfere with, or disrupts, the general campus educational purpose is subject to disciplinary action.

#### 10.0 Citizenship Misconduct/Causes for Disciplinary Measures

- 10.1 Dishonesty or knowingly furnishing false information to the Institute.
- 10.2 Forgery, alteration, or misuse of Institute documents, records, or identification.
- 10.3 Use, possession, or distribution of narcotics, drugs, or alcoholic beverages, except as expressly permitted by law. For more details about our alcohol policy please go to New Mexico Tech Handbook, <a href="https://www.nmt.edu/nmt-student-handbook-cs-student-academics">www.nmt.edu/nmt-student-handbook-cs-student-academics</a>.
- 10.4 Possession of weapons, fireworks, or other explosives on Institute property, including student housing, except as expressly permitted by law or policy and in designated areas.
- 10.5 Theft of, or damage to, Institute property, or causing injury to a member of the Institute community or a campus visitor.
- 10.6 Physical assault, mental abuse, intimidation or coercion of any person on Institute-owned or controlled property, or at Institute-sponsored or -supervised functions.
- 10.7 Any conduct which threatens or endangers the health, safety, personal rights, or dignity of any person.
- 10.8 Unauthorized entry to Institute facilities or use of Institute equipment.
- 10.9 Violations of rules governing residence in Institute-owned or -controlled property.
- 10.10 Violations of Institute policies or of campus regulations, including those concerning the registration of student organizations, use of Institute facilities or time, place, and manner of public expression.
- 10.11 Obstruction or disruption of teaching, research, administration, disciplinary procedures or Institute functions, including public service functions, or of other authorized activities on Institute premises.
- 10.12 Violation of the laws of the State of New Mexico or of any other governmental body with jurisdiction.
- 10.13 Harassment of individuals (physically, sexually or emotionally) via direct contact or electronically. For more on NMT's sexual harassment policies please go to <a href="http://www.nmt.edu/images/stories/hr/pdfs/employee\_handbook\_1999.pdf">http://www.nmt.edu/images/stories/hr/pdfs/employee\_handbook\_1999.pdf</a>.

#### 11.0 Non-Academic Discipline Policy & Procedures

11.1 The New Mexico Tech Non-Academic Discipline Policy has two primary purposes:

First, it is intended to ensure that the student charged with disciplinary infractions is granted due process of law consistent with the principles of the United States Constitution. Due process means a fundamentally fair procedure based upon reasonable principles impartially applied.

Second, the policy is intended to educate the accused student in question regarding the standards of conduct expected at Tech and throughout society as a whole. The campus judicial process is not intended to mimic a genuine adversarial court proceeding but is based upon sound judicial practices.

Students violating The Student Code of Conduct are subject to disciplinary action in accordance with the procedures listed below.

#### 11.2 Bringing of Charges

Charges of violations of The Student Code may be brought by any member of the student body or staff, including, but not limited to, members of the faculty and the administration. Charges must be in writing, must specify the nature of the violation, and must give details as to time, place, and persons involved. This statement must be given to the Dean of Graduate Studies by the complainant within ten business days of the incident(s) in question or the report of a violation.

#### 11.3 Notification of Charges

Accused students charged with violations of The Student Code must be notified in writing via email and/or campus mail of the charge by the Dean of Graduate Studies within ten business days of the bringing of charges. This notice must contain the particulars specified in the written statement of charges, give the student an opportunity to discuss the incident with the Dean of Graduate Studies, and provide a notification of where to find New Mexico Tech's Guide to Conduct and Citizenship and the Non-Academic Discipline Policy in the New Mexico Tech Catalog.

#### 11.4 The Dean of Graduate Studies' Investigation

The Dean of Graduate Studies or his/her designated representative will investigate the charges. He/she may claim a student is responsible for said charges and impose disciplinary penalties as stated in the "Non-Academic Disciplinary Action" section. The action taken shall constitute the Dean of Graduate Studies' decision. The dean of Graduate Studies will notify the student in writing his/her determination within twenty days of the receipt of the Bringing of Charges statement or ten days from the end of any additional time period granted to the student.

Regardless of the action taken by the Dean of Graduate Studies, the student has the right to request an appeal.

#### 12.0 Non-Academic Disciplinary Action

**12.1** A student who is found responsible of violating Institute policy may be subject to one or more of the following penalties:

- Costs for damage to school property
- Requirement to complete community service projects
- Suspension of the right to use Institute facilities for a period of time
- Removal and/or banishment from campus housing
- Disciplinary probation, not to exceed one calendar year (recorded in the student's file in the Dean of Graduate Studies' Office)
- Interim suspension (see "12.2 Interim Suspension")
- Disciplinary suspension, not to exceed one calendar year (recorded in the student's permanent file in the Office of the Registrar and noted on the student's transcript)

- Permanent dismissal (recorded in the student's permanent file in the Office of the Registrar and noted on the student's transcript)
- **12.1.1** If none of the above penalties is deemed appropriate, other disciplinary action may be imposed by the Dean of Graduate Studies based on the violation(s). A student may be given an oral or written warning or statement that no disciplinary action is warranted.
- **12.1.2** Disciplinary action may be taken in cases where students are convicted of breaking criminal or civil law off campus.
- **12.1.3** The Dean may also proceed with disciplinary action against a student or students without waiting for the results of criminal proceedings.
- **12.1.4** The decision whether or not to take action shall belong to the Dean.

#### 12.2 Interim Suspension

At times, on the basis of his/her investigation, the Dean of Graduate Studies may conclude that it is necessary to suspend a student immediately prior to a hearing on the matter. This may be the case when the student in question is believed to be dangerous to himself or herself, to others, or to property. Under such circumstances, the Dean of Graduate Studies, or, in his/her absence, the Vice President for Academic Affairs, the Associate Vice President for Academic Affairs or a person designated by the Institute President, may impose an interim suspension with a hearing to be set at a later date.

An interim suspension may not be imposed unless it is based upon facts that show that the student's continued presence on campus may constitute a danger to the student, to others, or to property.

An interim suspension may not be based upon mere suspicion of guilt.

Any student suspended on an interim basis has the right to a hearing before the Student Discipline Committee (see Section 13). The student suspended on an interim basis must present a written request for a hearing to the Dean of Graduate Studies and to the President of the Graduate Association within five days of the notification of the interim suspension. The hearing must be held within five days of the suspended student's request for a hearing unless the student charged requests a delay, in which case the times specified in the following section shall apply.

The interim suspension shall terminate when the hearing is held. The Dean of Graduate Studies may impose regular disciplinary penalties at this point in the proceedings.

#### 13.0 Student's Right to Appeal a Non-Academic Disciplinary Action

**13.1** Upon request by the student charged and subjected to disciplinary action, the case will be appealed to the Student Discipline Committee:

- the request must be made in writing to the Dean of Graduate Studies;
- a graduate student must send a copy of the request to the President of the GraduateStudent Association;
- the request must be made within five days of the receipt of the notification from the Dean of Graduate Studies.

#### 13.2 Student Discipline Committee

**13.2.1** The Student Discipline Committee shall hear appeals to cases of students charged with violations of General Campus Rules and subject to disciplinary penalties if requested by the student charged as outlined in section 13.0. The Committee will then make its decision following a hearing.

- **13.2.2** The Student Discipline Committee shall be composed of:
  - One member and one alternate member of the Supreme Court of the Student Government Association (or other members of the Student Government Association if the Supreme Court members are unavailable) as designated by the President of the Student Government Association
  - Two members of the Graduate Student Association and one alternate as designated by the President of the Graduate Student Association
  - Three members of the Faculty Senate and two alternates (not members of the administration other than chairpersons of academic departments) elected by the Faculty Senate Student Discipline Committee
- **13.2.3** Either party to the dispute may disqualify one member of the Student Discipline Committee. Members may also disqualify themselves and should do so if they are aware of any reason they would not be able to render a fair and impartial decision.
- **13.2.4** The Student Discipline Committee shall establish its own procedures and shall select its own Chairperson. A quorum shall consist of all six members of the committee. (In the event that one or more committee members are unable to meet at times consistent with the provisions of Interim Suspension and Hearings, an alternate member shall serve.)
- **13.2.5** The Chairperson must vote on each and every issue. In case of a tie vote on the charges, the student shall be found innocent, and in case of a tie vote on the discipline imposed, the less serious disciplinary action shall be recommended to the Dean of Graduate Studies.

#### 13.3 Hearing

The hearing is not intended to be a full-fledged adversarial proceeding: it is intended to be a fair hearing with ample opportunity for both parties (the student and the Institute) to present the facts. The Institute will be represented by the Dean of Graduate Studies or his/her designated representative.

#### The following procedures shall apply:

- **13.3.1** Both parties will be notified of the date of the hearing by the President of the Graduate Student Association at least ten days prior to the hearing (except in the case of interim suspension). In exceptional cases, the Student Discipline Committee may choose to hold the hearing at an earlier time, but only with the express agreement of both parties.
- **13.3.2** Both parties shall be permitted to inspect, at least 24 hours in advance of the hearing, any documentary evidence that the other party intends to submit at the hearing. Both parties shall submit the documentary evidence with a list of witnesses who will testify at the hearing to the President of the Graduate Student Association after receiving notification of the hearing date.
- **13.3.3** The person or party who is charged with violating The Student Code is responsible for presenting his or her case; advisors or support persons (including attorneys) of either party can be present but are not permitted to present arguments or evidence in the hearing.
- **13.3.4** Both parties may question any witness who testifies at the hearing.
- **13.3.5** A recording will be made of the hearing. A more formal record by a court reporter may be arranged by either party at their own expense.
- **13.3.6** The hearing shall be private if so requested by the student charged.
- **13.3.7** The student charged is not required to testify in his/her own defense and failure to testify shall not be held against the student.
- **13.3.8** The Student Discipline Committee will base its findings and decision solely on the evidence presented at the hearing.
- **13.3.9** The Student Discipline Committee shall give a written copy of its findings and decision to the parties within a reasonable amount of time. A copy of the findings and decision will also be kept on file in the Dean of Graduate Studies' Office.

**13.3.10** The Student Discipline Committee may affirm, reverse or modify the decision of the Dean of Graduate Studies. The decision of the Student Discipline Committee shall be final unless appealed and reversed or modified.

#### 13.4 Appeal of Student Discipline Committee Decision

Either the student charged or the Dean of Graduate Studies may appeal the decision of the Student Discipline

Committee. This appeal, which must be in writing, will be sent to the Vice President for Academic Affairs of the Institute within ten days of the date of the Student Discipline Committees written decision.

The Vice President for Academic Affairs' review shall be limited to a review of the record made before the Student Discipline Committee, including all documentary evidence, if any, admitted. However, the Vice President for Academic Affairs may allow such additional testimony and/or documentary evidence to be presented to him/her as he/she may, at his/her sole discretion, determine necessary in order to clarify the facts and/or the respective position of the parties. The Vice President for Academic Affairs may recommend to the President of the Institute affirmation, reversal, or modification of the Student Discipline Committee's decision. The President may affirm, reverse, or modify the Student Discipline Committee's decision.

Following this, the decision of the President shall be binding. Should the President be a party to the dispute, a person selected by the Regents shall perform the duties assigned to the President. The decision on the appeal shall be returned in a timely manner.

#### 14.0 Records of Disciplinary Actions and Hearings

#### 14.1 Record of Non-Academic Disciplinary Actions and Hearings will be kept as follows:

- **14.1.1** Records of violations of the Conduct and Citizenship Policy and The Student Code that result in a disciplinary action taken shall be kept by the Office of Academic Affairs for 10 years after the date of action taken. The Dean of Graduate Studies may opt to keep a copy of the files in the Center for Graduate Studies for 10 years after the date of action taken.
- **14.1.2** A record of non-academic disciplinary suspension will remain in the student's permanent file in the Office of the Registrar and will be noted on the student's academic transcript.
- **14.1.3** A record of permanent dismissal will remain in the student's permanent file in the Office of the Registrar and will be noted on the student's transcript.
- **14.1.4** Any student may examine his or her own file and may request that records of non-academic disciplinary action be removed and destroyed. Such requests will be reviewed by the Dean of Graduate Studies and must be honored if the relevant period specified in paragraph 14.1.1 above has expired.
- **14.1.5** If a New Mexico Tech undergraduate student applies to a graduate program at New Mexico Tech, the student's application and graduate record will include only records of violations that are included on the student's academic transcript. This is the same access that any graduate program, undergraduate program or place of employment will have when transcripts are required.

# **Graduation Requirements**

To graduate, a student must fulfill the following:

- 1) The student must be a regular student.
- 2) The student must declare which catalog he or she is graduating under.

If a student is continuously enrolled (excluding summer sessions), the student may choose the degree requirements to be satisfied from:

- a) the catalog in effect when the student first enrolled or
- b) any subsequent catalog. Under special circumstances (such as being called away to active military duty), a student may use the catalog under which he or she was admitted. Each case will be dealt with individually. A readmitted student **must** choose degree requirements to be satisfied from:
- a) the catalog in effect when the student was readmitted or
- b) any subsequent catalog provided the student is continuously enrolled after readmission.
- 3) General Education Core Curriculum Requirements—see page 81.
- 4) The student must also complete the courses specified by the major department.
- 5) New Mexico Tech's Community Education classes (designated by the letter "C" in the course number) may not be used to fulfill degree requirements for any graduate degree.
- 6) The student's cumulative grade point average must equal 3.0 or greater.
- 7) The student must complete a minimum of 30 credit hours at Tech.
- 8) A candidate for a degree, before registering for the final semester of enrollment, must announce candidacy to the Registrar by filing an "Intent to Graduate" form. Deadlines for submitting a Declaration of Intent are June 1 for those completing their degrees in August, July 1 for those completing their degrees in December, and December 1 for those completing their degrees in May. The Intent to Graduate form must include a copy of the student's course program and must be signed by the student's academic advisor and the Center for Graduate Studies.
- 9) All fees and financial obligations to NM Tech must be paid before a student will be awarded a degree.
- 10) Students must complete all degree requirements in order to participate in commencement.

#### Major

Your major is your primary field of study. The number of credit hours required in your major varies by program.

#### Minor

New Mexico Tech awards graduate minors for a limited number of secondary fields of study. (See page 5 for a list of graduate minors.) The number of credits required for a graduate minor vary from program to program, with a minimum of 12 credit hours required.

You must declare a graduate minor and be assigned a minor advisor prior to completing the coursework for the graduate minor.

#### **Curriculum Changes**

The Faculty Senate reserves the right to make curriculum changes. Assurance is given to students that proper measures will be employed to avoid hardships that may result from such changes.

#### **Degree Conferral Schedule**

New Mexico Tech confers degrees on a monthly basis. Degrees are submitted for conferral on the first day of each month and will be conferred by the last day of that month. When the Registrar receives documentation that a degree has been completed in the middle of a month, the 30-day conferral process will start on the first day of the next month.

The exception to this schedule is the month of May. If the Registrar receives documentation that a degree has been completed between May 1 and the last day of the spring semester, that degree will be conferred by the Board of Regents on the last day of the spring semester. Degrees that are documented as complete after the last day of the spring semester will begin the 30-day conferral process on June 1.

Students who need proof of degree completion pending the conferral process may request a letter of completion from the Registrar's Office.

#### Commencement

Commencement ceremonies are held each year in early May.

If you finish your degree requirements prior to May, you may participate in ceremonies held for that academic year. Students must complete all degree requirements in order to participate in commencement. See following pages for a list of honors awarded at commencement ceremonies.

#### **Honors and Awards**

#### **Commencement Awards**

#### Founders' Award

A Founders' Award was created to honor the persons responsible for establishing the New Mexico School of Mines in Socorro in 1889, especially J. J. Baca and Ethan Eaton. The award is presented to the recipient of an advanced degree who has made an outstanding contribution to NMT through scholarship, research, and involvement in campus affairs. The recipient is chosen by faculty nomination and Faculty Senate election. The award consists of a plaque and a \$400 cash prize.

#### **Langmuir Award**

The Langmuir Award for Excellence in Research is given for an outstanding scientific research paper by any student or graduate of New Mexico Tech. The paper must have been submitted to or published by a recognized journal during the preceding year. The recipient is selected by the Faculty Senate's Honorary Degrees and Awards Committee. The award is named in honor of Irving Langmuir (Nobel Laureate, 1932) who conducted extensive research with NMT staff. The award consists of a plaque and a \$200 cash prize.

## New Mexico Tech Student Association and Graduate Student Association Service Awards

The New Mexico Tech Student Association and Graduate Student Association present appreciation awards to students, faculty, and staff, who have done the most for the students of NM Tech.

#### Alumni Association Distinguished Achievement Award

This award is presented to alumni who have achieved distinction in their special fields of endeavor. Awards are presented to alumni of both the New Mexico School of Mines and New Mexico Institute of Mining and Technology. Recipients are selected by the Alumni Association Board from those nominated by other alumni, faculty and staff, or friends of New Mexico Tech.

### Alumni Association Distinguished Service Award

The Alumni Association Distinguished Service Award is presented to alumni or friends of New Mexico Tech who have contributed outstanding service. Recipients are selected by the Alumni Association Board from those nominated by other alumni, faculty and staff, or friends of New Mexico Tech.

#### **Distinguished Teaching Award**

The Distinguished Teaching Award is presented each year to a faculty member based on recommendations and nominations from students, alumni, and other faculty.

#### **Distinguished Research Award**

This award is presented each year to an outstanding researcher on the NM Tech faculty or staff nominated by their colleagues and chosen by a committee of fellow researchers.

## Department Awards

Department	Name of Award	Criteria and Description	
Biology	David K. Shortess Prize	Awarded to the outstanding graduating student in biology	
Chemistry	Morris F. Stubbs Award	Given in honor of Morris F. Stubbs, professor emeritus	
Computer Science	Patrick Orr Memorial Award	Given to the outstanding graduate student who demonstrates excellence in scholarship and potential for service in computer science education. The award is given in memory of Patrick Orr, a former member of the Computer Science Department.	
Earth and Environmental Science	Albuquerque Gem & Mineral Club Scholarship	Given to a junior or senior majoring in earth science who displays academic excellence in the field	
	Anton and Anita Budding Graduate Research Scholarship	Given to a graduate student in good standing in the earth and environmental science department.	
	Estwing Award	Given to a senior graduating with a degree in earth science. The award consists of a rock hammer and certificate.	
	New Mexico Geological Society Lucille Pipkin Undergraduate Scholarship	Given to a junior or senior earth science student, with preference to students with interests in subsurface, sedimentary, and/or petroleum geology.	
	New Mexico Geological Society Registration Award	Given to a student majoring in earth science. The award pays for registration for the New Mexico Geological Society's Fall Field Conference	
	New Mexico Geological Society Grant-in-Aid	Given to a student majoring in earth science who is doing research in New Mexico. A cash award of up to \$500.	
	Roswell Geological Society Award	Given to a graduate student or a graduating student who is majoring in earth science.	
Environmental Engineering	Paige Ashman Memorial Prize	Given to a graduating senior who has demonstrated excellence in environmental engineering and is active in the student environmental club.	
CLASS	Howard Sylvester Prize	Given to the member of the graduating class who has shown high achievement in the Humanities.	
Information Technology	Addy and Ravi Bhasker Award	Given to the graduating student with the highest GPA in Information Technology.	
Materials & Metallurgical Engineering	Ashman Award	Given to B.S., M.S., and Ph.D. students who have demonstrated excellence in the field and who are active in the department activities.	
	Ron Roman Scholarship	Given to a student who has demonstrated excellence in materials engineering and contributed to Tech's research effort.	
	Javorsky Scholarship	Given to an undergrad student showing academic excellence that shows a financial need.	
	Albuquerque Journal Scholarship	Given to a junior level undergraduate based on proposed research, to be applied to their senior year.	
Petroleum Engineering	John M. Kelly Fellowship	Given to an outstanding graduate student	
	Langdon B. Taylor Award	Given to a student who has rendered outstanding service to the student chapter of the Society of Petroleum Engineers.	
Physics	Abraham and Esther Brook Prize	Given to a student who has demonstrated excellence in physics. The \$650 prize is given at the end of the junior year.	
	Leslie Fallon Award	Given to the graduate student who does the best job of teaching freshman physics laboratory.	
	Marvin Wilkening Award	Given to the graduating physics student who has demonstrated excellence in experimental physics. The technical tool kit is valued between \$600 and \$700.	

# Course Descriptions and Curricula

#### **Course Descriptions**

#### **Course Numbers**

Courses are arranged numerically by department or program. In general, courses numbered from 100 to 199 are intended primarily for first-year students (freshmen); 200 to 299 for second-year students (sophomores); 300 to 399 for third-year students (juniors); 400 to 499 for fourth-year students (seniors); and 500 to 599 for graduate students. Exceptions may be made with the approval of the major advisor and instructor. Graduate students may be allowed credit for courses numbered 300 and above.

#### **Credit Hours**

Following the course title, you will find the number of credit hours (cr) you will receive for completing the course. Credit hours are measured in class hours (cl hrs), lab hours (lab hrs), and recitation/discussion hours (recitation hr).

"1 cl hr" and "1 recitation hr" correspond roughly to one hour spent in class each week and is equivalent to one (1) credit hour. "3 lab hrs" equals about three hours per week in the laboratory and is also equivalent to one (1) credit hour.

In addition to class and lab time, you can expect to spend approximately three hours of study and preparation for each credit hour of class.

#### Prerequisites and Corequisites

Some courses have prerequisites or courses you must successfully complete before enrolling in that course. Exceptions can be made with the instructor's approval. If you enroll in a course in which you do not have the prerequisites without the instructor's permission, you may be disenrolled. Corequisites are courses taken during the same semester.

Prerequisites and corequisites are not determined by the student's individual catalog, but rather by the catalog in effect at the time that the course is offered.

#### Semester Offered

Not all courses are offered every semester. The first semester of a two-semester-sequence course (such as ACCT 201/202, ES 110/111, and ERTH 101/102) is usually offered in the fall semester. The second semester is usually offered in the spring semester. Courses that are offered only one semester ("Offered fall semesters") or alternate years ("Offered Spring

Semesters and alternate years") are so noted. "Offered on demand" implies that the course is offered only when a sufficient number of students want to enroll in the course.

#### **Description**

The course description contains a short list of topics to be covered during the semester. This list is not meant to be exhaustive.

#### **Cross-listing**

Sometimes courses fulfill the requirements for two different degrees and are listed under both programs. In such cases, the course description will end with the cross-listing "(Same as BCS 283)."

#### **Electives**

Electives are courses taken in addition to the specific courses required by your major. Electives bring your credit hours up to the required number for graduation. Some majors allow students to choose many electives; others, few. Please refer to the specific degree requirements for your major. All graduate electives must be 300-level or above.

#### **Degree Requirements**

In order to graduate, every student must complete the General Degree Requirements (page 81). In addition, each program has its own set of course requirements as well as the minimum number of credit hours needed to graduate.

# General Education Core Curriculum Requirements

## **General Degree Requirements for a Master of Science Degree**

The general requirements common to all M.S. degree curricula in the sciences and engineering fields are listed below. Additional requirements for specific curricula are listed under the appropriate department.

It is required that a student preparing for the M.S. degree:

- Have competence in the subject matter of the standard introductory college courses in chemistry, physics, and one natural science,
- Have a working knowledge of calculus and the content of one additional course in mathematics beyond calculus,
- Have a minimum of six credit hours of approved upper-division or graduate course work from another department,
- 4. Declare a major with at least 12 credit hours of course work above the 500-level, exclusive of research credits, and
- 5. Complete a research project culminating in a thesis or independent study paper.

Note: These general requirements do not apply to students in the Master of Science for Teachers (MST) program. MST requirements are listed on page 117 of the Program and Course Catalog.

## General Degree Requirements for a Doctor of Philosophy Degree

The degree of Doctor of Philosophy requires a high level of competence in a recognized field of learning, and only those students showing unusual promise are accepted. A dissertation that contributes to the general field of knowledge must be written and defended before a committee of the faculty.

In addition to dissertation credits, course requirements for each specialty are listed under the programs and courses of instruction for each department.

## Administration, Faculty, and Professional Staff

#### **Board of Regents**

Jerry A. Armijo Richard N. Carpenter Deborah Hicks Deborah Peacock Israel Rios-Rodriguez-Student Regent

#### Administration

President	Daniel H. López
Vice President for Academic Affairs	Warren Ostergren
Vice President for Administration	
and Finance	Lonnie Marquez
Vice President for Student and	
University RelationsMelis	sa Jaramillo-Fleming
Vice President for Research and	
Economic Development	Van Romero
Director, New Mexico Bureau of Geology	
and Mineral Resources	L. Greer Price
Director, New Mexico Petroleum	
Recovery Research Center	Robert L. Lee
Director, Energetic Materials Research	
and Testing Center (EMRTC)	John Meason
Dean of Arts & Sciences.	William D. Stone
Dean of Engineering	Thomas W. Engler
Dean of Graduate Studies	_
Dean of StudentsMelis	sa Jaramillo-Fleming

#### **Academic Department Chairs**

Biology	Snezna Rogelj
Chemistry	
Civil and Environmental Engineering	
CLASS	Doug Dunston
	Susan Dunston
	<b>Alexander Prusin</b>
Computer Science. Engineering	Subhasish Muzumdar
Earth and Environmental Science	
Electrical Engineering	<del>-</del>
Management	
Materials Engineering	
Mathematics	_
Mechanical Engineering	
Mineral Engineering	U
Petroleum and Chemical Engineering	
PhysicsM	
Psychology and Education	

#### **Department Directors**

Academic Affairs	.Warren Ostergren
Academic Center for Technology	Iver Davidson
Admission	Anthony Ortiz
Advancement	
Affirmative Action and Compliance	
Auxiliary Services	Valerie Del Curto
Bookstore	Scott Botko
Budget and Analysis	
Bureau of Geology	L. Greer Price
Business OfficeAnna M	
Campus Dining	Paul Parnell
Campus Police	George Murrillo
Career Services	
Child Care Center	
Community Education	
Cooperative Education	
Counseling Services	Janet Ward
EMRTC	
Facilities Management	
Geophysical Research Center	
Golf Course	
Graduate Studies	Lorie Liebrock
Gymnasium	Melissa Begay
Health Services	Susan Lewark
Human Resources	
ICASA	
Information Technology & Communication	Joe r ranklin
Instrument Room	. Ed ward Gangemi
International and Exchange Services	Lillian Armijo
IRIS/PASSCAL Instrument Center	. Bruce C. Beaudoin
Langmuir Laboratory	Ken Eack
Library	
Macey Center	
•	
Multicultural Programs	
Office for Student Learning	
Performing Arts	Ronna Kalish
Post Office	
President's Office	
Property Office	
PRRC	
Public Information	
Purchasing Services	Kimela Miller
Registrar	
Research and Economic Development	
Residential Life	
Science Fair and Olympiad	
Student Affairs	vucnaei voegeri

#### **Faculty and Professional Staff**

- Key: NMBGMR, New Mexico Bureau of Geology and Mineral Resources; PRRC, New Mexico Petroleum Recovery Research Center; ICASA, Institute for Complex Additive Systems Analysis; MRO, Magdalena Ridge Observatory; ACT, Academic Center for Technology; EMRTC; Energetic Materials Research and Testing Center
- **Emma Aafloy**, Associate Director for Budget, Administration and Finance

B.S., New Mexico Institute of Mining and Technology

- **Robert Abernathy,** Computational Analyst, EMRTC; Adjunct Faculty, Mechanical Engineering B.S., Ph.D., New Mexico State University
- **Rakhim Aitbayev,** Associate Professor of Mathematics Higher Education Diploma, Candidate of Sciences, Kazakh State University, USSR; Ph.D., University of Kentucky
- **Bruce Allen**, Field Geologist (NMBGMR) B.S., Ph.D., University of New Mexico
- Jeff Altig, Associate Professor of Chemistry and Chair of the Department B.S., University of Oregon; Ph.D., University of Wisconsin-Madison
- Peter C. Anselmo, Associate Professor of Management and Chair of the Department; Adjunct Faculty, Computer Science; Information Technology Program Coordinator; Research Scientist, ICASA B.A., New Mexico Highlands University; M.B.A., Ph.D., University of Texas at Austin
- Rene Arechiga, Associate Professor of Electrical Engineering B.S., Instituto Politecnico Nacional; M.S., Stanford University; Ph.D., University of New Mexico
- Paul Arendt, Assistant Professor of Physics
   B.S., New Mexico Institute of Mining and Technology;
   M.S., University of California Davis; Ph.D., New Mexico Institute of Mining and Technology
- **Lillian Armijo**, Director of Community Education B.B.A., M.A., New Mexico State University
- Ivan Avramidi, Professor of Mathematic and Chair of the Department, Adjunct Faculty, Physics M.S., Rostov State University, Rostov-on-Don, Russia; Ph.D., Moscow State University, Moscow
- Valentina Avramidi, Associate Director for Finance (NMBGMR) B.S., Rostov State University, Russia
- Gary Axen, Associate Professor of Geology B.S., M.S., Massachusetts Institute of Technology; Ph.D., Harvard University
- **Rose Baca-Rivet,** Director of Science Olympiad, Academic Affairs B.S., New Mexico Institute of Mining and Technology
- Sayavur I. Bakhityarov, Associate Professor of Mechanical Engineering B.Sc., M.Sc., State Oil Academy, Azerbajan; Ph.D, Institute of Thermophysics, Russia; Sc.D., Birmingham University, UK

- Robert Balch, Research Scientist (PRRC), Adjunct Faculty,
  Petroleum Engineering and Computer Science
  B.S., Evergreen State College; M.S., Ph.D., New Mexico
  Institute of Mining and Technology
- **Lynda L. Ballou,** Instructor of Mathematics B.S., Colorado State University-Pueblo; M.S., Ph.D., Kansas State University
- **Marvin Banks**, Program Manager, Hazardous Materials Testing (EMRTC)
  - B.S., New Mexico Institute of Mining and Technology
- Luz Diaz Barreras, Veteran's Administrator, Academic Affairs B.S., New Mexico Institute of Mining and Technology M.A., University of New Mexico
- Noel Barstow, Staff Scientist (IRIS)

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- Roy S. Baty, Adjunct Faculty, Mechanical Engineering B.S., M.S., University of Utah; M.S., New Mexico Institute of Mining and Technology; Ph.D., Pennsylvania State University
- Paul W. Bauer, Associate Director and Senior Geologist (NMBGMR); Adjunct Faculty, Earth and Environmental Science B.S., University of Massachusetts; M.S., University of New Mexico; Ph.D., New Mexico Institute of Mining and Technology
- **Bruce C. Beaudoin**, Director IRIS/PASSCAL Instrument Center B.S., Western Washington University; M.S., Ph.D., Stanford University
- George W. Becker, Coordinator, Master of Science for Teachers
  Program
  - B.S., New Mexico Institute of Mining and Technology
- **Melissa Begay**, Director of Physical Recreation/Student Activities B.A., M.A., New Mexico Highlands University
- **Nouraddine Benalil**, Computer Support Specialist (PRRC) B.S., New Mexico Institute of Mining and Technology
- Susan L. Bilek, Professor of Geophysics B.S., Pennsylvania State University; M.S., Ph.D., University of California, Santa Cruz
- **Douglas Bland**, Economic Geologist, Special Projects (NMBGMR)
  - B.S., Virginia Tech; M.S., University of Wyoming
- **Brian Borchers**, Professor of Mathematics B.S., M.S., Ph.D., Rensselear Polytechnic Institute
- **Penelope Boston**, Professor of Cave and Karst Science, Chair of the Department
  - B.A., M.S., Ph.D., University of Colorado, Boulder
- **Noreen Boykin**, Assistant Director of Auxiliary Services B.S., New Mexico Statue University
- Ronald Broadhead, Principal Petroleum Geologist, Head of Petroleum Section (NMBGMR); Adjunct Faculty, Earth and Environmental Science B.S., New Mexico Institute of Mining and Technology; M.S., University of Cincinnati

- **Art Bukowski**, Lecturer in Mathematics
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- Nancy Bush, Visiting Assistant Professor of Chemistry B.S., New Mexico Institute of Mining and Technology; Ph.D., University of New Mexico
- **Elizabeth Bustamante,** Technical Information Associate (PRRC)
  - B.A., Idaho State University; M.L.S., Indiana University Library School
- **Daniel Cadol,** Assistant Professor of Hydrology B.S., Whitman College; M.S., Ph.D., Colorado State University
- **Paul Calvert,** Visiting Professor of Chemical Engineering Ph.D., Massachusetts Institute of Technology
- Christian Carrico, Associate Professor of Environmental Engineering B.S., M.S., Ph.D., University of Illinois at Urbana-
- Champaign

  Richard A. Cervantes, Associate Vice President for Research
- and Economic Development B.B.A., M.S., North Texas State University
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- William Xavier Chávez, Jr., Professor of Geological Engineering
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  B.S., Institute of Marine Science and Technology, Taiwan;
  M.S., Ph.D., Texas A&M University
- **Pabitra Choudhury,** Assistant Professor of Chemical Engineering
  - B.S., Indian Institute of Technology Bombay; M.S., Indian Institute of Technology Roorkee; M.S., Ph.D., University of South Florida
- Sanchari Chowdhury, Visiting Assistant Professor B.S., National Institute of Technology, Durgapur, India; M.S., Indian Institute of Technology, Roorkee, India; Ph.D., University of South Florida
- **Kent C. Condie,** Professor of Geochemistry B.S., M.A., University of Utah; Ph.D., University of California, San Diego
- Wesley Cook, Assistant Professor of Civil Engineering B.S., New Mexico State University; M.S., Ph.D., Utah State University

- **Robert H. Cormack**, Professor of Psychology A.B., M.A., Ph.D., University of Cincinnati
- Rodolfo C. Correa, Deputy Director (EMRTC)

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  University
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- Gina D'Ambrosio, Editor (NMBGMR)
  - B.G.S., New Mexico Institute of Mining and Technology
- Iver Davidson, Director of Academic Center for Technology B.A., North Dakota State University; M.F.A., Vermont College; Ph.D., University of Nebraska
- **Elaine DeBrine-Howell,** Associate Dean for Student Success B.A., University of New Mexico; M.A., St. Mary's University
- **Valerie DelCurto,** Director of Auxiliary Services B.B.A., University of New Mexico
- Mary Dezember, Associate Vice President of Academic Affairs, Professor of English

  B.A. University of Evansville: M.A. Ph.D. Indiana
  - B.A., University of Evansville; M.A., Ph.D., Indiana University
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