

NEW MEXICO AMP
Partner Campus Profile for New Mexico State University Grants Campus
Completed by Marlene Chavez-Toivanen
February 23, 2009

Selected Campus Data

Campus Enrollment (all disciplines): **Estimated annualized FTE 608**

Percentage of Underrepresented Students: **70%**

Number of Faculty: **16 Fulltime, ≈50 part-time**

Number of Degree Programs: **10 Associate Degrees**

6 Associate of Applied Science Degrees

18 Certificate Degrees

Selected STEM Data

STEM Enrollment:

Percentage of Underrepresented Students:

Number of STEM Faculty: **5**

1. Marlene Chavez-Toivanen, Mathematics, marchave@nmsu.edu, 505-287-6652
2. Bob Baker, Mathematics, rnbaker@nmsu.edu, 505-287-6650
3. Charlotte Otts, Natural Sciences & Mathematics, cotts@nmsu.edu, 505-287-6649
4. Sharon Walsh, Natural Sciences, slwalsh@nmsu.edu, 505-287-6661
5. Doug Bocaz-Larson, Computer Science, dbocaz@nmsu.edu, 505-287-7891

Number of STEM Degree Programs: **4 (see descriptions below)**

What is the average number of students transferring to 4-year STEM programs per year? **< 10**

Transfer-related Information:

Most of our students at NMSU Grants are interested in Education, Social Work, Criminal Justice, Business and Nursing. There is some interest in the Bachelor in Information and Communication Technology that is offered from NMSU Las Cruces in a distance education format. The trend I observe is that students are completing the associate degree computer technology and then transferring to complete the B.S. in Information & Communication Technology.

The math department works hard to prepare students for the engineering calculus (MATH 191), but most students transfer before they take it at our campus. The science department offers Chemistry on a regular basis but has not had success with enrollment into Engineering Physics. Our enrollment in STEM related fields is small and because we are a small campus we are sometimes forced to concentrate on the programs that generate FTE. Because of these obstacles, our campus has an Associate of Science that students can earn and still transfer to a 4-year university and have most of the preliminary requirements for engineering- or science-related field.

To promote STEM fields we have had a STEM club that met monthly that would discuss current events and sponsor guest speakers. That is an initiative that needs to be revived.

Our campus is working with Dr. Tanya Gallegos from the United States Geological Service since Grants has a mining industry.

Institution's Contributions to/Potential for Meeting New Mexico AMP Goals:

My institution's greatest potential for contributing to the goals of the New Mexico AMP program is to provide transfer students to any 4-year university in the state. NMSU Grants has a large minority population and can help the goals of AMP by mentoring and encouraging more participation in STEM fields.

It would be most helpful to me if New Mexico AMP would provide more services for our students like the SCCORE program. Several of our students have participated and have had great experiences. NMSU Grants does not have the resources to provide our students with research and AMP allows for our students to have those experiences.

Program Descriptions:

COMPUTER TECHNOLOGY

Associate of Applied Science

Program Manager: Doug Bocaz-Larson, (505)287-6656

The Associate of Applied Science in Computer Technology is designed to give students a complete background in

both theory and practical experience. (See also Certificate in Computer Technology)

GENERAL EDUCATION REQUIREMENTS – 20 credits

COMM 253G, Public Speaking **or**

COMM 265G, Principles of Human

Communication.....3

ENGL 111G, Rhetoric & Composition4

ENGL 203G, Business & Professional
Communication **or** ENGL 218G, Technical &
Scientific Communication.....3

MATH 115 **or** 120, Intermediate Algebra **or**
any higher level MATH course.....3

PSY 201G, Introduction to Psychology **or**
SOC 101G, Introductory Sociology.....3

Natural Science "G" course (lower division).....4

COMPUTER TECHNOLOGY CORE – 36 credits

C S 110G, Computer Literacy3

OECS 125, Operating Systems.....3

OECS 185, PC Maintenance & Selection3

OECS 203, UNIX Operating Systems.....1

OECS 204, LINUX Operating Systems3

OECS 207, Windows.....3

OECS 209, Computer Graphic Arts1

OECS 213, Image Processing.....1

OECS 215, Spreadsheet Applications3

OECS 221, Cooperative Experience I3

OECS 230, Data Communication & Networks I3

OECS 231, Data Communication & Networks II.....3

OECS 260, HTML Programming.....3

OECS 280, Desktop Publishing Techniques3

ELECTIVE COURSE REQUIREMENTS – 10 credits

COLL 101, College/Life Success	3
OELA 205 or PL S 205, Legal & Ethical Issues for the Web, or C S 209, Special Topics	2
Any elective courses.....	5
TOTAL.....	66 credits

WEB MASTERY

Associate of Applied Science

Program Manager: Doug Bocaz-Larson, (505)287-6656

The Associate of Applied Science degree in Web Mastery prepares students for entry into advanced level positions

in Web design, development, maintenance, and e-commerce.

GENERAL EDUCATION REQUIREMENTS – 19 credits

C S 110G, Computer Literacy	3
COMM 253G, Public Speaking or COMM 265G, Principles of Human Communication.....	3
ENGL 111G, Rhetoric & Composition	4
ENGL 203G, Business & Professional Communication or ENGL 218G, Technical & Scientific Communication.....	3
MATH 115 or 120, Intermediate Algebra or any higher level MATH course.....	3
PSY 201G, Introduction to Psychology or SOC 101G, Introductory Sociology.....	3

WEB MASTERY CORE – 34 credits

OECS 125, Operating Systems.....	3
OECS 185, PC Maintenance & Selection I	1
OECS 203, UNIX Operating Systems.....	1
OECS 204, LINUX Operating Systems	3
OECS 207, Windows.....	3
OECS 209, Computer Graphic Arts	1
OECS 213, Image Processing.....	1
OECS 216, Programming for the Web.....	3
OECS 218, Web Page Programming Support	3
OECS 221, Cooperative Experience I	3
OECS 260, Introduction to HTML.....	3
OEGR 160, Image Processing or ART 161, Digital Imaging I.....	3
OEGR 230 or CMT 230, Web Page Development I.....	3
OEGR 275 or CMT 275, Web Page Development II	3

ELECTIVE COURSE REQUIREMENTS – 13 credits

COLL 101, College/Life Success	3
OEBU 210, Marketing.....	3

OELA 205 or PL S 205, Legal & Ethical Issues for the Web or C S 209, Special Topics	2
Any elective course(s)	5
TOTAL.....	66 credits

ASSOCIATE OF SCIENCE DEGREE*

**Effective Spring 2007, pending approval*

Program Manager: Stan Carlson, (505)287-6661

The Associate of Science (A.S.) degree represents the completion of the first two years of several bachelor's degree programs related to the sciences. Students pursuing the Associate of Science degree are advised to select courses that fulfill requirements for specific programs at New Mexico State University and that transfer to other four-year institutions. Many of the courses are General Education (G) courses. Students interested in the natural sciences (e.g., biology or chemistry) or fields closely related to the sciences (e.g., allied health science) are encouraged to follow this degree plan. Students are strongly encouraged to meet with an academic advisor for help in planning their studies and should be prepared to select their coursework from the following areas:

General Education Requirements – 25 credits

English Composition

ENGL 111G.....4

ENGL 218G.....3

Oral Communication

COMM 253G or 265G3

Computer Science

C S 110G or BCS 110G.....3

Social/Behavioral Sciences

Select three credits from History:

HIST 101G, 102G, 201G, or 202G.....3

Select three credits from Human Thought & Behavior:

ANTH 201G, ANTH 202G, C.EP 110G,
LING 201G, PSY 201G, or WS 201G.....3

Select three credits from Social Analysis:

ECON 201G, ECON 251G, ECON 252G,
GEOG 112G, GEOG 201G, GOVT 100G,
GOVT 110G, GOVT 150G, GOVT 160G,
JOUR 105G, MGT 201G, SOC 101G,
SOC 201G, S WK 221G, or WS 201G.....3

Humanities

Select three credits from literature or fine arts:

ENGL 244G, ART 101G, ART 110G,
MUS 101G, MUS 201G, or THTR 101G.....3

Select three credits from philosophy:

PHIL 101G, 201G, or 211G3

Mathematics – 12 credits

MATH 115 or 1203

MATH 142G or 210G3

Select six credits from:

MATH 121, MATH 180, MATH 185,

MATH 190, MATH 191, MATH 192,
MATH 230, MATH 279, MATH 280,
MATH 291, MATH 292, E ST 251,
STAT 251, & STAT 271.....6

Laboratory Sciences – 20 credits

Select from:

Biology w/lab.....4–12
Chemistry w/lab4–12
Geology w/lab.....4–8
Geography w/lab.....4–8
Physics w/lab4–8
Astronomy w/lab.....4–8

[Note: at least 8 lab science credits must be designated as General Education (G suffix)]

Electives – 6 credits (minimum)

COLL 101 **or** 1122–3
Any electives.....3–4

TOTAL..... 66 credits

ELECTRONIC TECHNOLOGY

Associate of Applied Science

Program Manager: Bruce McDowell, (505)287-6636

The Associate degree in Electronic Technology prepares students to enter the workforce as electronic technicians in

a variety of settings. This program emphasizes laboratory experience and the development of application skills.

GENERAL EDUCATION REQUIREMENTS – 16 credits

COMM 253G, Public Speaking **or**
COMM 265G, Principles of Human
Communication.....3
C S 110G, Computer Literacy3
ENGL 111G, Rhetoric & Composition4
ENGL 203G, Business & Professional
Communication **or** ENGL 218G, Technical
& Scientific Communication.....3
PSY 201G, Introduction to Psychology **or**
SOC 101G, Introductory Sociology.....3

ELECTRONIC TECHNOLOGY CORE – 39 credits

OEES 110, Electronics I.....4
OEES 120, Mathematics for Electronics **or**
any higher MATH course4
OEES 135, Electronics II.....4
OEES 155, Electronics CAD & PCB Design4
OEES 160, Digital Electronics I.....4
OEES 175, Soldering Practices2
OEES 205, Semiconductor Devices4
OEES 215, Microprocessor Applications I.....4
OEES 221, Cooperative Experience I.....3
OEES 225, Computer Applications for Technicians .3

OEES 235, Digital Electronics II.....3
RELATED COURSE REQUIREMENTS – 5 credits
OEET 120, Basic Motor Controls5
ELECTIVE COURSE REQUIREMENTS – 7 credits
COLL 101, College/Life Success3
Any OEET course(s) not included above4
TOTAL..... 67 credits