



Associate in Engineering in INFORMATION ENGINEERING TECHNOLOGY 2012-2014

The curriculum for the Associate in Engineering (AEng) in Information Technology is designed for those engineering students who intend to launch a career in the design, installation, maintenance, and repair of computer networks used for critical data entry, transfer, retrieval, and management. Coursework in the program is practice-oriented and prepares students to work in a variety of computer-intensive environments, such as technical organizations, small or large businesses, product design or manufacturing companies, and data-directed services. The breadth of training in hardware, software, troubleshooting equipment, and other computer tools will enable the graduate to work in a variety of roles in such occupations as network designer, network support and administrator, project manager, data applications or computer communications engineer, test and integration manager or technologist in business applications. The graduate of this curriculum could be a computer network specialist, and will be broadly versed in mathematics, physics, computer science, and business fundamentals.

The program objectives are the following:

1. Graduates will be situated in growing entry-level careers involving support of Information Technology Systems.
2. Graduates will have demonstrated involvement in high-level technical roles.

Completion of this program should result in the following student outcomes:

1. An ability to apply knowledge of mathematics, science, and engineering
2. An ability to function on multidisciplinary teams
3. An ability to communicate effectively
4. Broad education necessary to understand the impact of engineering solutions in a global, economic, environmental, and societal context
5. A knowledge of contemporary issues
6. An ability to use the techniques, skills, and modern engineering tools necessary for engineering practice

GENERAL EDUCATION (35 CR)

Area I. Communications (9)

ENG	111	English Composition I (3)
ENG	116	Technical Writing (3)
SPCH	130	Public Speaking (3)

Area II. Mathematics (11)

MATH	145	Introduction to Probability & Statistics (3)
MATH	162	Calculus I (4)
MATH	163	Calculus II (4)

Area III. Laboratory Sciences (8)

PHYS	215/L	Engineering Physics I with lab (4)
PHYS	216/L	Engineering Physics II with lab (4)

Area IV. Social/Behavioral Sciences (3)

ECON	201	Microeconomics (3)
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Area V. Humanities and Fine Arts (3)

HUM	100	FYE: History and Culture of Northern New Mexico (3)
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Area VI. Library Technology, Library Research Skills (1 cr)

LT	101	Library Research Skills (1)
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PROGRAM REQUIREMENTS (30 CR)

Business (3)

BA Lower-Division Elective (3)

Electrical, Electronic, and Computer Engineering (18)

EECE 105L Microcomputer Systems (4)

EECE 132 Computer Networks I (3)

EECE 152L Computer Programming I (4)

EECE 231 Intermediate Programming I (3)

EECE 238/L Computer Logic Design (4)

Information Technology (6)

IT 210 IT Systems (3)

IT 250 Introduction to Databases (3)

Support Technologies (3)

ENGR 110 Introduction to Engineering (3)

TOTAL CREDITS: 65

SUGGESTED SEQUENCE OF COURSES

First Semester (17 cr)

LT 101 Library Research Skills (1)

HUM 100

First Year Exp: History and Culture of
Northern New Mexico (3)

ENG 111 English Composition I (3)

EECE 152/L Computer Programming I (4)

EECE 132 Computer Networks I (3)

ENGR 110 Introduction to Engineering (3)

Second Semester (18 cr)

MATH 162 Calculus I (4)

IT 210 IT Systems (3)

EECE 238/L Computer Logic Design (4)

EECE 231 Intermediate Programming (3)

EECE 105/L Microcomputer Systems (4)

Third Semester (17 cr)

ENG 116 Technical Writing (3)

MATH 162 Calculus II (4)

PHYS 215/L Engineering Physics I with Lab (4)

ECON 201 Microeconomics (3)

IT 250 Intro. to Databases (3)

Fourth Semester (13 cr)

PHYS 216/L Engineering Physics II with Lab (4)

BA Elective (3)

MATH 145 Introduction to Probability and Statistics (3)

SPCH 130 Public Speaking (3)