

PRIORITY # 1: WITHIN THE CONTEXT OF A LIBERAL ARTS FOUNDATION, FOR EACH FIELD OF STUDY, PROVIDE A LEAN, QUALITY CURRICULUM THAT PREPARES STUDENTS FOR RICH, FULL LIVES, PRODUCTIVE CAREERS, AND CIVIC LEADERSHIP.

Goal # 1: Maintain ABET accreditation for the undergraduate curriculum per Criteria 2000, utilizing the assessment plan originally developed for ABET's visit during the Fall of 1998.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Conduct our annual ABET assessment plan.	EE Faculty	May 15 each year	Time is already planned	Checklist
B. Seek input from the EE student body at least once per semester.	EE Chair	By Nov. and Apr. each year	None	Checklist
C. Seek input from alumni and employers of EE graduates at least once per academic year.	EE Chair and Advisory Chair	By May 15 each year	Minimal extra time & travel \$	Checklist
D. Review curriculum of five (5) different competitive EE programs on an annual basis.	EE Faculty	By May 15 each year	Minimal time	Checklist

Goal # 2: Maintain a strong graduate curriculum in electrical engineering.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Implement a long-range plan (four semesters) of senior-level elective and graduate course offerings.	EE Faculty	By May 15 each year	Minimal extra time	Checklist
B. Offer a minimum of three (3) senior-level elective and graduate courses per semester.	EE Faculty	As necessary	None	Checklist
C. Examine existing course offerings to determine the depth and breadth within particular areas of expertise.	EE Faculty	As necessary	None	Graduate exit interviews
D. Examine the possibility of offering a set of core courses to all EE graduate students.	EE Faculty	Fall 2001	None	Checklist

Goal # 3: Maintain a modern electrical engineering curriculum that satisfies the needs of our students' potential employers.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Seek input of employers (e.g., HR Departments) of EE graduates at least once per academic year.	EE Chair	By Sept. each year	Minimal time & travel \$	Checklist
B. Seek input of EE alumni at least once per academic year.	EE Chair and Advisory Chair	By Sept. each year	Minimal time & travel \$	Checklist
C. Revitalize the UND EE Advisory Council for consultation on industrial needs.	EE Chair and Advisory Chair	Fall of 2000	Minimal time & travel \$	Checklist

PRIORITY # 2: EXPAND AND STRENGTHEN THE UNIVERSITY'S COMMITMENT TO RESEARCH AND CREATIVE ACTIVITY, BOTH AS A MEANS OF ENRICHING THE LEARNING ENVIRONMENT AND AS A DRIVER FOR ECONOMIC DEVELOPMENT.

Goal # 1: Each faculty member in electrical engineering will be involved as a Principal Investigator, Co-Investigator, or Consultant in the submission of at least two (2) research, development, or educational proposals per academic year, to governmental agencies and/or industrial corporations. Collaboration on multidisciplinary proposals will be highly encouraged among faculty members, departments, schools, research laboratories, universities, and industry.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Where needed, work with the UND Writing Center to produce clear, competitive proposals.	EE Faculty	As needed	None	Checklist & Oct. Supl.
B. Faculty members are encouraged to collaborate on research/development/teaching activities, rather than serving as sole Principal Investigators.	EE Faculty	As needed	None	Checklist & Oct. Supl.
C. Redistribution of research/teaching/administrative duties upon the award of grants and contracts, within reason. (Grants/contracts will buy faculty time)	EE Chair/Faculty	As needed	None	Checklist
D. Commitment of department to providing faculty members the time to write proposals and conference/journal papers.	EE Chair/Faculty	As needed	Faculty time	Checklist

Goal # 2: Graduate enrollment in electrical engineering will be increased to at least one (1) student per faculty member by AY 2003-2004.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Encourage grant writing activities among the faculty members, to provide research assistantships to incoming graduate students.	EE Faculty	On going	Faculty time	Checklist
B. Establish a departmental committee to recruit graduate students and to review incoming applications. Participate in graduate student recruiting trips with other departments on campus.	EE Faculty	Fall 2000	None	Checklist
C. Utilize all teaching assistantships allocated to the department by the SEM Dean.	EE Chair	Summer 2001	None	Checklist
D. Establish a scholarship for UND EE seniors accepted to the UND graduate school.	EE Faculty and Advisory Council	December 2000	None	Checklist

Goal # 3: The electrical engineering faculty will promote undergraduate research and development activities through the initiation of practical, hands-on projects.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Incorporate Research Experiences for Undergraduates (REU) program into all National Science Foundation research proposals emanating from EE.	EE Faculty	As needed	None	Checklist & reviewed proposals
B. Encourage multidisciplinary research, development, and design activities (e.g., satellite design, Senior design, etc.).	EE Faculty	On going	None	Checklist & reviewed proposals
C. Inform faculty and students about scholarship programs, including the McNair program and departmental and school wide scholarship funds.	EE Chair	Fall 2000	None	Checklist

PRIORITY # 3: SERVE THE PEOPLE OF NORTH DAKOTA, THE REGION, THE NATION, AND THE WORLD MORE EFFECTIVELY THROUGH APPLIED AND BASIC RESEARCH, CULTURE AND ARTS PROGRAMMING, AND ECONOMIC DEVELOPMENT PROGRAMS AS WELL AS THROUGH A COMPREHENSIVE ARRAY OF EDUCATIONAL AND ACADEMIC PROGRAMS.

Goal # 1: Promote the growth of the Corporate Engineering Degree Program (CEDP), as an outreach mechanism to the region, the nation, and the world.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Utilize better service through Internet technologies.	EE Faculty, Continuing Ed.	On going	Faculty time	Checklist
B. Offer more CEDP courses to reduce the time to degree (e.g., Summer offerings, etc.).	EE Faculty, CEDP Coordinator	On going	Faculty time	CEDP Statistics
C. Provide alternative laboratory opportunities for CEDP students.	EE Faculty, CEDP Coordinator	On going	Faculty time	Checklist

Goal # 2: Promote engineering and science education opportunities to regional K-12 students.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Participate in SEM Open House.	EE Faculty	April of every year	None	Checklist
B. Support Dakota Science Center and engineering activities.	EE Faculty	On going	Faculty time	Checklist
C. Encourage the IEEE to conduct science experiments in area schools.	EE Faculty, Students	On going	Travel \$	Checklist
D. Investigate and plan for a “College for Kids” camp at UND during each Summer.	EE Chair, Faculty	By Dec. 2000	Student Stipends	Checklist

Goal # 3: Support economic development and high-tech entrepreneurship opportunities within North Dakota and the region.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Work with local small businesses and local entrepreneurs (e.g., consulting, etc.).	EE Faculty	As available	Faculty time	Checklist & Oct. Supl.
B. Encourage student training in entrepreneurship.	EE Faculty	On going	None	Transcripts & exit interviews

PRIORITY # 4: IMPROVE THE CAMPUS CLIMATE FOR LEARNING AND LIVING.**GOAL # 1: Provide for electrical engineering student learning needs (state-of-the-art curriculum, classrooms, laboratories, computer facilities, software, test equipment, supplies, study areas, tutorial sessions, etc.).**

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Maintain computer facilities and modern software packages.	EE Faculty and SEM	On going	None (Student Lab Fees)	Student & Alumni feedback
B. Maintain state-of-the-art laboratories.	EE Faculty	On going	None (Student Lab Fees)	Student & Alumni feedback
C. Develop new laboratory capabilities (e.g., ESD, Signal Integrity, and Spacecraft Engineering).	EE Faculty	On going	Alumni & Industry	Laboratory inventory

Goal # 2: Provide an interesting and exciting curriculum, integrated with in-course and extracurricular research and design projects.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Continue to develop and enhance EE 101 (recruiting through hands-on projects).	EE Faculty/EE101 Instructor	On going	Minimal \$	Checklist & EE101 syllabus
B. Continue to develop the Aerospace focus area (satellite design).	EE Faculty	On going	Could be significant	Satellite Vision
C. Continue to develop and evaluate the Computer Science focus area.	EE Faculty	On going	None	Student sheets
D. Promote the Entrepreneurship Certificate Program (high-tech entrepreneurship) for both the undergraduate and graduate students.	EE Faculty	On going	None	Student transcripts

Goal # 3: Encourage participation in electrical engineering-related student organizations (e.g., IEEE).

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Promote students' membership in engineering organizations.	EE Faculty, Students	On going	None	Membership Roster

Goal # 4: Provide a positive working environment for faculty and staff by increasing Engineering Department salaries so they are comparable to median Midwest region schools of our size.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Seek additional salary compensation through endowments, gifts, and grants.	EE Chair and Faculty	On going	40 K/Yr	Regional survey
B. Seek additional salary support through university administration.	Pres/VPAA	On going	40 K/Yr	Regional survey

PRIORITY # 5: OPTIMIZE AND STABILIZE ENROLLMENT TO ACHIEVE THE DESIRED NUMBER AND MIX OF STUDENTS APPROPRIATE TO THE UNIVERSITY'S MISSION.

Goal # 1: Increase total electrical engineering undergraduate enrollment to 200 by AY 2005-2006.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Increase transfer student enrollments to <u>25</u> per year by AY <u>2005-2006</u>.	EE Faculty	On going	Time & travel \$	Enrollment statistics
B. Market undergraduate program in highly populated areas (e.g., Twin Cities).	EE Faculty, SEM Enrollment Services	On going	Time & travel \$	# of student contacts
C. More aggressively market the program to regional high school students.	EE Faculty, SEM Enrollment Services	Every Fall	Time and travel \$	# of student contacts
D. Develop high-profile focus programs (e.g., spacecraft systems engineering).	EE Faculty	On going	Time & travel \$	Status sheets & Web

Goal # 2: Increase the Corporate Engineering Degree Program (CEDP) undergraduate enrollment in electrical engineering to 25 upper-division students (juniors and seniors) by AY 2005-2006.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Investigate the feasibility of offering more CEDP courses per year.	EE Chair, CEDP Faculty Coordinator, and the Cont. Ed. Program Director	On going	Faculty time	CEDP statistics
B. Utilize Internet for faster delivery of courses.	EE Faculty	On going	Time	Checklist
C. Write and periodically update a CEDP marketing plan, and aggressively market the program in collaboration with Continuing Education and the SEM Student Activities Coordinator.	EE Chair, CEDP Faculty Coordinator, and the Cont. Ed. Program Director	On going	Time	Checklist
D. Investigate and experiment with the alternative delivery of laboratories.	EE Faculty	On going	Time & \$	Checklist

Goal # 3: Increase total electrical engineering graduate enrollment to at least fifteen (15) by AY 2003-2004.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. More aggressively market the program to undergraduates receiving degrees from UND (e.g., scholarship incentives).	EE Chair and Faculty	On going	Alumni \$	Checklist
B. Establish international exchange programs (e.g., Norway), and encourage recruitment of international graduate students.	EE Chair and Faculty	Summer 2001	Alumni \$	Checklist & enrollment
C. Stress graduate cooperative education program.	EE Chair and Faculty	On going	None	Enrollment
D. Collaborate with other schools at UND (e.g., Odegard School of Aerospace Sciences) and with industry.	EE Chair and Faculty	On going	None	Checklist

PRIORITY # 6: OPTIMIZE THE USE OF INFORMATION TECHNOLOGY TO IMPROVE STUDENT LEARNING, RESEARCH, AND THE ADMINISTRATION OF THE UNIVERSITY.

Goal # 1: Enhance existing courses through the incorporation of World Wide Web sites and multimedia presentations.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Investigate development and use of online laboratory experiments.	EE Faculty	On going	Time & minimal \$	Checklist & Web
B. Acquire notebook computers for all EE faculty members for use in classrooms and traveling.	EE Chair	Summer 2001	\$5,000 each (Alumni or faculty start-up funds)	Checklist
C. Encourage use of university-sponsored online resources (e.g., Blackboard).	EE Chair	Fall 2000	Time	Checklist & Web

Goal # 2: Sustain support of the student-funded Computer Aided Engineering Network (CAEN), through the periodic upgrade of computer hardware and modern, industrial-grade software packages.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Make sure that EE is well-represented on each semester's proposal to the Technology Fee Committee.	EE Faculty	Each Semester	None	Checklist

PRIORITY # 7: IN SUPPORT OF ALL OF THE ABOVE, ENSURE THAT THE UNIVERSITY HAS A WELL-PREPARED, ENTHUSIASTIC FACULTY AND STAFF, FIRST-RATE PHYSICAL FACILITIES, AN ADEQUATE FINANCIAL RESOURCE BASE, AND IS APPROPRIATELY AND EFFICIENTLY ORGANIZED.

Goal # 1: Hire and retain well-qualified faculty and staff within the department of electrical engineering.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Conduct the interview and hiring process in a timely fashion.	EE Chair, SEM Dean, and EE search committee	As needed	None	Checklist
B. Provide the necessary resources for teaching, research, and professional development.	EE Chair	On going	Grants \$ and Start-up \$	Faculty evaluations

Goal # 2: Promote professional development within the department, by encouraging and supporting each faculty member to participate in at least one (1) external workshop/conference and at least one (1) internal workshop/conference per academic year.

Action Items	Responsibility	Date	Additional Resources Required	Assessment Tools
A. Participate in external research conferences.	EE Faculty	On going	Travel \$	Checklist & Oct. Supl.
B. Participate in professional development workshops (e.g., education pedagogy and managerial techniques).	EE Faculty	On going	Travel \$	Checklist & Oct. Supl.
C. Encourage involvement in local, regional, and national professional organizations.	EE Chair and Faculty	On going	Travel \$	Checklist & Oct. Supl.