NORTHERN ARIZONA UNIVERSITY

GRADUATE CURRICULUM

PROPOSAL FOR NEW GRADUATE ACADEMIC PLAN, PLAN CHANGE, OR PLAN DELETION

NOTE: Use tab to move between fields. Use space bar to check a box.

1. College Engineering & Nat. Sci.

2. Department Electrical Egr

3. Academic Plan Master of Engineering - Electrical Engineering Emphasis

5. Effective Date FALL 2006

6. Is this proposal for a : ☐ New Plan ☒ Plan Change ☐ Plan Deletion

7.

For Plan Changes, place the existing catalog text in this column. Please copy and paste the text directly from the *current* on line academic catalog: (http://www4.nau.edu/aio/AcademicCatalog/academiccatalogs.htm) *Be sure you include all catalog text that pertains to this plan change* ***For New Plans, leave this column blank.***	**Show the proposed changes in this column. Please BOLD the changes, to differentiate from what is not changing.** *(Describe the changed requirements under headings that match those used in the left column. Please be aware that if the units are not totaled correctly, the catalog editor will adjust them accordingly.)*
M.Eng. Electrical Engineering Through this academic plan, you can focus on either very large-scale integration or systems architecture. The VLSI area covers microelectronics, integrated circuit design, architectural issues, and the state-of-the-art, computer-aided design tools—all of the issues involved in today's semiconductor technology. The systems architecture area covers communications, signal processing, control, and VLSI implementation of these systems.	M.Eng. Electrical Engineering This program prepares you for professional practice with a broad, applied education with courses in several technical areas.
For this 30-unit plan, you take: · 3 units in applied mathematics, in a relevant topic such as numerical methods, graph theory, or discrete mathematics · 3 units in engineering management (Course may be offered through such colleges as engineering, business, or management.) · 12 units from a single cluster of courses listed on the plan of study · 12 units of electives, selected with your advisory committee's approval to meet your specific interests (This can include up to 6 units in an optional practice-oriented project, developed and conducted under your advisory committee's guidance and focused on a problem of interest to the practicing engineering community.)	For this 30-unit plan, you take: · 3 units in applied mathematics, in a relevant topic such as numerical methods, graph theory, or discrete mathematics · 3 units in engineering management (Course may be offered through such colleges as engineering, business, or management.) · 12 units of electrical engineering 500 level and above courses, selected with your advisory committee's approval (This may include up to 3 units of EE 698.) · 12 units of electives, selected with your advisory committee's approval to meet your specific interests (This may include up to 6 units in an optional practice-oriented project, developed and conducted under your advisory committee's guidance and focused on a problem of interest to the practicing engineering community.)
Please note that at least 15 of the required 30 units must be in electrical engineering.	Please note that at least 15 of the required 30 units must be in electrical engineering. You must complete at least 24 hours of formal coursework, other than such individualized studies as independent study, directed readings, practice-oriented project, and research.
Click here for more information about Electrical Engineering graduate courses and faculty.	Click here for more information about Electrical Engineering graduate courses and faculty.

8. Please list the Learning Outcomes of the Plan/Subplan (see degree major assessment webpage - http://www4.nau.edu/assessment/main/degree/degree.htm).

1. Students will be able to base analysis, problem solving and design on core advanced EE theory
2. Students will be able to develop deeper understanding of an area of concentration in their graduate programs.
3. Students will be able to apply modern tools for computations, simulations, analysis, and design
4. Students will be able to communicate engineering results effectively.
5. Students will be able to practice the profession of engineering at an advanced level
6. Students will be able to apply the study skills that are supportive of lifelong learning

9. Justification for proposal. Please indicate how past assessments of student learning prompted proposed changes.

This proposal gives students more flexibility in selecting courses in the Master of Engineering electrical engineering emphasis.

10. If this plan will require additional faculty, sace, or equipment, how will these requirements be satisfied?

No additional resources are required.

11. Will this plan proposal affect other programs, plans, curricula, or enrollment at NAU.

(Please provide letters of support from each department involved.)

no

14. Will present library holdings support this academic plan/subplan?

yes

Approvals

_____

Department Chair/ Unit Head (if appropriate) Date

_____

Chair of college curriculum committee Date

_____

Dean of college Date

For University Graduate Committee use only

_____

For University Curriculum Committee Date

Action taken: _____approved as submitted _____approved as modified

Note: Submit original to Graduate College office. That office will provide copies to the college dean, department chair, and Academic Information Office after approval.