NOTE: Changes to programs may require course changes, which must be processed electronically. Any questions should be directed to Associate Provost David Reinhold at 7-4564 or david.reinhold@wmich.edu

DEPARTMENT: ECE  
COLLEGE: CEAS  
PROPOSED EFFECTIVE FALL YEAR: 2019

PROPOSED IMPROVEMENTS: Academic Program Proposed Improvements

☐ New degree*  
☐ New major*  
☐ New curriculum*  
☐ New concentration*  
☐ New certificate  
☐ Revised major  
☐ New minor  
☐ Revised minor  
☐ Admission requirements  
☐ Graduation requirements  
☐ Deletion (required by others)  
☐ Deletion (not required by others)  
☐ Change in Title  
☐ Transfer

☐ Other (explain**)  
** Other: ____________________________

Title of degree, curriculum, major, minor, concentration, or certificate: 
Master of Science in Electrical Engineering (EENM)

Chair, Department Curriculum Committee: ____________________________  
Date: ____________________________

CHECKLIST FOR DEPARTMENT CHAIRS/DIRECTORS

☐ For new programs and other changes that have resource implications, the dean has been consulted.

☐ When appropriate, letters of support from department faculty are attached.

☐ When appropriate, letters of support from other departments in the same college are attached.

☐ The proposal has been reviewed by HIGE for possible implications for international student enrollment.

☐ The proposal is consistent with the departmental assessment plan, and identifies measurable learning outcomes for assessment.

☐ Detailed resource plan is attached where appropriate.

☐ All questions attached have been completed and supporting documents are attached.

☐ The proposal is written and complete as outlined in the Faculty Senate guidelines and the curriculum change guides.

Chair/Director: ____________________________  
Date: ____________________________

CHECKLIST FOR COLLEGE CURRICULUM COMMITTEE

☐ The academic quality of the proposal and the faculty involved has been reviewed.

☐ Detailed resource plan is attached where appropriate.

☐ Consistency between the proposal and the relevant catalog language has been confirmed.

☐ The proposal has been reviewed for effect on students transferring from Michigan community colleges. Detailed information on transfer articulation must be included with undergraduate proposals.

☐ Consistency between the proposal and the College and department assessment plans has been confirmed.

☐ Consistency between the proposal and the College and department strategic plans has been confirmed.

☐ All questions attached have been completed and supporting documents are attached.

☐ The proposal is written and complete as outlined in the Faculty Senate guidelines and the curriculum change guides.

______________________________  
Date: ____________________________

Revised March 2018. All previous forms are obsolete and should not be used.
# Checklist for College Deans

- For new programs and proposed program deletions, the provost has been consulted.
- For new programs, letter of support from University Libraries Dean indicating library resource requirements have been met.
- When appropriate, letters of support from other college faculty and/or chairs are attached.
- When appropriate, letters of support from other college deans, whose programs/courses may be affected by the change, are attached.
- The proposal has been reviewed for implications for accreditation, certification, or licensure.
- Detailed resource plan is attached where appropriate.
- All questions attached have been completed and supporting documents are attached.
- The proposal is written and complete as outlined in the Faculty Senate guidelines and the curriculum change guides.

<table>
<thead>
<tr>
<th>Dean:</th>
<th>Date</th>
</tr>
</thead>
</table>

## For Proposals Requiring Review By:

**GSC/USC, EPGC, Graduate College, and/or Faculty Senate Executive Board**

<table>
<thead>
<tr>
<th>Decision</th>
<th>Categorization</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Return to Dean</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Forward to:</td>
<td>Curriculum Manager:</td>
<td>Date:</td>
</tr>
<tr>
<td>Approve □ Disapprove</td>
<td>Chair, GSC/USC:</td>
<td>Date</td>
</tr>
<tr>
<td>Approve □ Disapprove</td>
<td>Chair, EPGC:</td>
<td>Date</td>
</tr>
<tr>
<td>Approve □ Disapprove</td>
<td>Graduate College Dean:</td>
<td>Date</td>
</tr>
<tr>
<td>Approve □ Disapprove</td>
<td>Faculty Senate President:</td>
<td>Date</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Decision</th>
<th>Categorization</th>
<th>Date</th>
</tr>
</thead>
<tbody>
<tr>
<td>Approve □ Disapprove</td>
<td>Provost:</td>
<td>Date</td>
</tr>
</tbody>
</table>

Revised March 2018. All previous forms are obsolete and should not be used.
1. Explain briefly and clearly the proposed improvement:

   Students must select one course from three Elective Concentration Areas Foundation Courses as part of the degree requirements. This request replaces one of the three foundation courses:

   Replace ECE 5540 Digital Electronics with ECE 5640 Communication Systems

2. Rationale. Give your reason(s) for the proposed improvement.

   The current Elective Concentration Areas Foundation Courses are:

   ECE 5200 - Power Electronics Dynamics and Control  Credits: 3 hours
   ECE 5530 - Microcontroller Applications  Credits: 3 hours
   ECE 5540 - Digital Electronics  Credits: 3 hours

   There are four concentration areas available to students. Two of the current Elective Concentration Areas Foundation Courses (ECE 5530 and ECE 5540) are both in the Computer Architecture and Digital Design Concentration Area. None are in the Communications and Signal Processing Concentration Area. ECE 5640 is in the Communications and Signal Processing Concentration Area. Replacing ECE 5540 with ECE 5640 offers students additional flexibility in tailoring a program of study.

3. Effect on other colleges, departments, or programs. If consultation with others is required, attach evidence of consultation and support. If objections have been raised, document the resolution. Demonstrate that the program you propose is not a duplication of an existing one.

   N/A

4. Effect on your department's programs. Show how the proposed change fits with other departmental offerings.

   ECE 5640 is regularly offered.

5. Alignment with college's and department's strategic plan, mission, and vision.

   N/A

6. Effects on enrolled students: Are program conflicts avoided? Will your proposal make it easier or harder for students to meet graduation requirements? Can students complete the program in a reasonable time? Show that you have considered scheduling needs and demands on students' time.

   Gives students more flexibility in tailoring a program of study.

7. Student or external market demand. What is your anticipated student audience? What evidence of student or market demand or need exists? What is the estimated enrollment? What other factors make your proposal beneficial to students?

   N/A

8. Effects on resources. Explain how your proposal would affect department and University resources, including faculty, equipment, space, technology, and library holdings. If proposing a new program, include a letter and/or email of support from the university libraries affirming that the library resource issues have been reviewed. Tell how you will staff additions to the program. If more advising will be needed, how will you provide for it? What will be the initial one-time costs and the ongoing base-funding costs for the proposed program? (Attach additional pages, as necessary.)

   ECE 5640 is regularly offered.

9. List the learning outcomes for the revised or proposed major, minor, or concentration. The department will use these outcomes for future assessments of the program.

   N/A

10. Describe how this change is a response to assessment outcomes that are part of a department or college assessment plan or informal assessment activities.

    N/A

Revised March 2018. All previous forms are obsolete and should not be used.
11. (Undergraduate proposals only) Describe in detail how this change affects transfer articulation for Michigan community colleges. For new majors or minors, describe transfer guidelines to be developed with Michigan community colleges. For revisions to majors or minors, describe necessary revisions to Michigan community college guidelines. Department chairs should seek assistance from college advising directors or from the admissions office in completing this section.

N/A

12. Please offer both "Current Catalog Language" and "Proposed Catalog Language" if there is to be a change in the catalog description for a given program. For the "current" language, please copy and paste relevant language from the most current catalog and for the "proposed" language, please share the exact proposed new catalog language. As possible, bold or otherwise note the key changes in the new proposed catalog language.

2018-2019 Graduate Catalog

Current Catalog Language (pages 393-393)
Elective Concentration Areas Foundation Courses
ECE 5200 – Power Electronics Dynamics and Control  Credits: 3 hours
ECE 5530 – Microcontroller Applications  Credits: 3 hours
ECE 5540 – Digital Electronics  Credits: 3 hours

Proposed Catalog Language
Elective Concentration Areas Foundation Courses
ECE 5200 – Power Electronics Dynamics and Control  Credits: 3 hours
ECE 5530 – Microcontroller Applications  Credits: 3 hours
ECE 5540 – Digital Electronics  Credits: 3 hours
ECE 5640 – Communication Systems Credits: 3 hours