ELECTRICAL ENGINEERING BS
Fall 2014 – Spring 2015

CONTACT INFORMATION
- Honors College Advisor: Kathleen Alligood (alligood@gmu.edu)
- Department Chair: Andre Manitius (amanitiu@gmu.edu)
- Department Program Coordinator: Pelin Kurtay (paksoy@gmu.edu)
- Department Academic Advisor: Smriti Kansal (skansal@gmu.edu)

Once students begin attending Mason and declare a major they should see both their Honors College and their major department advisor for advising. Students must confirm their major requirements with their department advisor and with PatriotWeb’s Degree Evaluation tool.

Note for students in the Volgenau School: Students who get a warning that they will be terminated from the Volgenau School for GPA have one semester to either (1) meet the department’s requirements, or (2) change major; otherwise, they will have the “Terminated from Volgenau” designation placed on their transcript. Please refer to the university catalog, under VSE: “Termination from Major” for more information.

ADVISING SHEET
- Honors College Requirement
- Department Requirement
- College Requirement

<table>
<thead>
<tr>
<th>1st Year – 1st Semester (Fall)</th>
<th>Credits</th>
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<tbody>
<tr>
<td>o HNRS 110: Research Methods (Grade C or better required)</td>
<td>4</td>
</tr>
<tr>
<td>♦ MATH 113: Analytic Geometry and Calculus I (Designated Placement Score Required)</td>
<td>4</td>
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<tr>
<td>♦ CS 112: Introduction To Computer Programming</td>
<td>4</td>
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<tr>
<td>♦ ENGR 107 or 107H: Introduction to Engineering (Grade C or better required)</td>
<td>2</td>
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<tr>
<td>♦ ECON 103 or ECON 103H: Contemporary Microeconomic Principles</td>
<td>3</td>
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<tr>
<td>Semester Total</td>
<td>17</td>
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<thead>
<tr>
<th>1st Year – 2nd Semester (Spring)</th>
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<tr>
<td>o HNRS 122: Reading the Arts</td>
<td>3</td>
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<tr>
<td>♦ ECE 101: Introduction to Electrical and Computer Engineering</td>
<td>3</td>
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<tr>
<td>♦ MATH 114: Analytic Geometry and Calculus II (prerequisite: &quot;C&quot; or better in MATH 113) or MATH 116: Analytic Geometry and Calculus II Honors</td>
<td>4</td>
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<tr>
<td>♦ PHYS 160/161 or PHYS 160H/161: University Physics I (Pre- or co-requisite MATH 114 or MATH 116)</td>
<td>4</td>
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<td>Semester Total</td>
<td>14</td>
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<th>2nd Year – 1st Semester (Fall)</th>
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<tr>
<td>♦ ECE 201: Introduction to Signal Analysis (prerequisite: &quot;C&quot; or better in MATH 113) (Grade C or better required)</td>
<td>3</td>
</tr>
<tr>
<td>♦ MATH 203: Matrix Algebra (Prerequisite MATH 114 or MATH 116)</td>
<td>3</td>
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<tr>
<td>♦ MATH 213: Analytic Geometry and Calculus III or MATH 215</td>
<td>3</td>
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<tr>
<td>♦ CS 222: Computer Programming for Engineers (Prerequisite CS 112)</td>
<td>3</td>
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♦ PHYS 260/261 or PHYS 260H/261: University Physics II (Pre- or co-requisite MATH 213 or MATH 215) 4

Semester Total 16

2nd Year – 2nd Semester (Spring)

- HNRS 230: Cross-Cultural Perspectives 3
- STAT 346: Probability for Engineers (Prerequisite MATH 213 or 215) or Department-approved humanities/social science elective 3
- ECE 220: Signals and Systems I (Prerequisite ECE 201, Corequisites MATH 203 and 214) 3
- ECE 285: Electric Circuit Analysis I (Prerequisite PHYS 260 and 261, Corequisite ECE 220, MATH 214) 6
- MATH 214: Elementary Differential Equations (Prerequisite MATH 213 or 215) or MATH 216 (additional Prerequisite MATH 203) 1

Semester Total 15

3rd Year – 1st Semester (Fall)

- HNRS 240: Reading the Past 3
- ECE 286: Electric Circuit Analysis II (Prerequisites ECE 285, MATH 214 or 216, ECE 220) 3
- ECE 320: Signals and Systems II (Prerequisite C or Better in ECE 220 and MATH 203) 3
- ECE 331/332: Digital Systems Design 4
- PHYS 262/263: University Physics III 4

Semester Total 17

3rd Year – 2nd Semester (Spring)

- HNRS 353: Technology in the Contemporary World (grade of C or better required) 3
- ECE 333/334: Linear Electronics I (Prerequisite C or Better in ECE 280 or ECE 285) 4
- ECE 305 or 421: Electromagnetic Theory or Classical Systems and Control Theory 3
- ECE 445: Computer Organization (Prerequisite C or better in ECE 331 and ECE 332 and CS 222) 3
- STAT 346: Probability for Engineers (Prerequisite MATH 213) or (if chosen previously) Department-approved humanities/social science elective 3

Semester Total 16

4th Year – 1st Semester (Fall)

- Two from ECE 305, 421, 433 or 460: Electromagnetic Theory, or Classical Systems and Control Theory, Linear Electronics II or Communication and Information Theory 6
- ECE 491: Engineering Seminar (Prerequisites: 90 credits applicable to electrical engineering) 5
- ECE 492: Senior Advanced Design Project I (Prerequisites: 90 credits applicable to electrical engineering) 5
NOTES

1. The Honors sections of these courses can be used to satisfy Honors College Requirement 3.
2. College requirements (VS) include 24 credits of department-approved, humanities and social science electives.
3. Students must complete each ECE, ENGR, BENG, CS, MATH, PHYS and STAT course presented as part of the required 121 credits for the degree with a grade of C or better.
4. Furthermore, students must also complete any course required by the program that is a prerequisite to another course applicable to the degree with a grade of C or better.
5. The Honors Program requirements fulfill the ENGH 302 prerequisite for ECE 491 and 492 but the prerequisite requirement is not automatically applied. Please contact Prof. Pelin A. Kurtay (paksoy@gmu.edu) to request a prerequisite override before attempting to register for these courses.
6. Note that ECE 285/ECE 286 courses taken at Mason prior to fall 2013 or transferred to Mason prior to fall 2014 do NOT meet the circuits analysis requirement. Students who fit in either category should contact the ECE department as soon as possible to discuss their options.

HONORS REQUIREMENTS (see advising section of Honors College website for further details)

- All Honors College students earning a BS degree must complete Requirements 1 and 2 of the Honors College Curriculum, including taking 3 courses under Requirement 2. In general, it is expected that those students earning a BS will take HNRS 122, HNRS 131, and HNRS 240 to fulfill Requirement 2. If they do not, then they must complete the corresponding general education requirement with courses that are outlined in the University Catalog for your catalog year.
- Students earning a BS degree must complete Requirement 3 by taking two additional Honors courses beyond Requirements 1 and 2 of the Honors College Curriculum. These courses must be approved by your Honors College advisor in your Plan of Study.