

## ELECTRICAL ENGINEERING BS – LASS Track

Fall 2009 – Spring 2010

### CONTACT INFORMATION

- Honors College Advisor: Kathleen Alligood (alligood@gmu.edu)
- Department Chair: Andre Manitiu (amanitiu@gmu.edu)
- Department Program Coordinator: William Sutton (wsutton@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.

### REQUIRED HOURS

- Hours Required in Major: 80
- Hours Required in Honors: See honors advisor

### ADVISING SHEET

- Honors College Requirement
- ◆ Department Requirement
- ▲ College Requirement

1 <sup>st</sup> Year – 1 <sup>st</sup> Semester (Fall)	Credits
○ HNRS 110: Introduction to Research (Grade C or better required)	4
◆ MATH 113: Analytic Geometry and Calculus I (a placement exam is required) <sup>4</sup>	4
◆ CS 112: Introduction To Computer Programming	4
◆ ENGR 107: Introduction to Engineering (Grade C or better required)	2
◆ ECON 103 or ECON 103H: Contemporary Microeconomic Principles	3
Semester Total	17
1 <sup>st</sup> Year – 2 <sup>nd</sup> Semester (Spring)	
○ HNRS 122: Reading the Arts	3
◆ ECE 101: Information Technology for Electrical Engineers (Grade C or better required)	3
◆ MATH 114: Analytic Geometry and Calculus II (prerequisite: "C" or better in MATH 113) or MATH 116: Analytic Geometry and Calculus II Honors	4
◆ PHYS 160/161 or PHYS 160H/161: University Physics I (Corequisite MATH 114)	4
Semester Total	14
2 <sup>nd</sup> Year – 1 <sup>st</sup> Semester (Fall)	
◆ ECE 201: Introduction to Signal Analysis (prerequisite: "C" or better in MATH 113) (Grade C or better required)	3
◆ MATH 203: Matrix Algebra (Prerequisite MATH 114)	3
◆ MATH 213: Analytic Geometry and Calculus III	3
◆ PHYS 260/261 or PHYS 260H/261: University Physics II (Corequisite MATH 213)	4
◆ CS 222: Computer Programming for Engineers (Pre-requisite CS 112)	3
Semester Total	16

<b>2<sup>nd</sup> Year – 2<sup>nd</sup> Semester (Spring)</b>	
○ HNRS 130: Conceptions of Self	3
○ HNRS 230: Cross-Cultural Perspectives	3
◆ ECE 220: Signals and Systems I (Prerequisite ECE 201, Corequisites MATH 203 and 214)	3
◆ ECE 280: Electric Circuit Analysis (Prerequisite PHYS 260 and 261, Corequisite ECE 220)	5
◆ MATH 214: Elementary Differential Equations (Prerequisite MATH 213 or 215)	3
Semester Total	17
<b>3<sup>rd</sup> Year – 1<sup>st</sup> Semester (Fall)</b>	
○ HNRS 131: Contemporary Society in Multiple Perspectives	3
○ HNRS 240: Reading the Past	3
◆ ECE 320: Signals and Systems II (Prerequisite C or Better in ECE 220 and MATH 203)	3
◆ ECE 331/332: Digital Systems Design (Corequisite ECE 280)	4
Semester Total	13
<b>3<sup>rd</sup> Year – 2<sup>nd</sup> Semester (Spring)</b>	
○ 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)	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)	3
◆ STAT 346: Probability for engineers (Prerequisite MATH 213)	3
Semester Total	16
<b>4<sup>th</sup> Year – 1<sup>st</sup> Semester (Fall)</b>	
◆ 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) <sup>2</sup>	1
◆ ECE 492: Senior Advanced Design Project I (Prerequisites: Senior Status in Electrical Engineering) <sup>2</sup>	1
◆ ECE Technical Elective	3
◆ ECE Advanced Laboratory	1
◆ PHYS 262/263 or 262H/263: University Physics III	4
Semester Total	16
<b>4<sup>th</sup> Year – 2<sup>nd</sup> Semester (Spring)</b>	
◆ ECE 493: Senior Advanced Design Project II	2
◆ One from ECE 305, 421, 433 or 460: Electromagnetic Theory, or Classical Systems and Control Theory, Linear Electronics II or Communication and Information Theory	3
◆ ECE Technical Electives	6

◆ ECE Advanced Laboratory	1
Semester Total	12
Total Hours	121

NOTES:

1. A grade of C or better is required in all ENGR and ECE courses.
2. The Honors Program requirements fulfill the ENGL 302 prerequisite for ECE 491 and 492 but the prerequisite requirement is not automatically applied. Please contact Prof. William Sutton ([wsutton@gmu.edu](mailto:wsutton@gmu.edu)) to request a prerequisite override before attempting to register for these courses.
3. College requirements (VS) include 24 credits of department-approved, liberal arts and social science electives.
4. MATH 113 fulfills the quantitative reasoning requirement for the Honors Program. A placement exam is required. See the Math Department for exam days and times.