BACHELOR OF SCIENCE IN COMPUTER ENGINEERING
MASTER OF SCIENCE IN ELECTRICAL AND COMPUTER ENGINEERING

BS/MS CURRICULUM OUTLINE - CLASS OF 2016, 2017

Sample Only – Actual Curriculum Sequence May Deviate from Sample

FALL       SPRING       SUMMER 1        SUMMER 2

Year 1

MATH1331  Calculus 1 for Engrs.  4  MATH1342  Calculus 2 for Engrs.  4  Vacation  Vacation
CHEM1351  General Chem for Engrs.  4  PHYS1511  Physics 1 for Engrs.  3
CHEM1353  Recitation for CHEM1351  0  PHYS1522  Physics 1 Lab  1
EE1100    Intro to Eng.g.  1  PHYS1533  ILS for PHYS1151  1
EE1110    Eng.g. Design  4  EE1111  Eng.g. Prob. Solv. & Comp.  4
NU Core   Arts Lvl. 1 OR Hum. Lvl. 1  4  ENG1111  College Writing  4

Year 2  BB

MATH2331  Diff. Eq./Lin. Alg.  4  PHYS1155  Physics 2 for Engrs.  3  NU Core  Social Science
PHYS1156  Physics 2 Lab  1  PHYS1157  ILS for PHYS1155  1
CS1500    Algorithms & DS  4  CS1501  Lab for CS1500  1
EECE2000  Intro to Eng.g. Coop  1  EECE2100  Circuits  4
EECE2140  Intro to ECE Lab  1  EECE2141  Intro to ECE Lab  1

Year 3  BB

MATH2310  Discrete Math  4  EECE2232  Digital Logic Design  4  ELECTIVE  Elective General Elective 2  4
EECE2233  Lab for EECE2232  1  EECE2412  Electronics 1  4
EECE2413  Lab for EECE2412  1  EECE2414  Optimization Methods  4
EECE3326  EECE Technical Elective  4

Year 4  BB

EECE3000  Prof. Issues in Eng.g.  1  ELECTIVE  Elective EECE Technical Elective 1  4
EECE3224  Computer Architecture  4  EECE3240  Fundamentals of Networks  1
EECE3240  Fundamentals of Networks  1  EECE3240  Fundamentals of Networks  1
EECE3326  Graduate Course  4  EECE3326  Graduate Course  4
EECE3326  *EEGW3302 Adv. Writing for Prof.  4

Year 5  BB

EECE3326  Graduate Course  4  EECE3326  Graduate Course  4
EECE3326  Graduate Course  4  EECE3326  Graduate Course  4
EECE3326  Graduate Course  4
EECE3326  EECE Technical Elective 3  4
EECE3326  Capstone Design 2  4
EECE3326  Graduate Course  4  EECE3326  EECE Technical Elective 4  4
EECE3326  Graduate Course  4  EECE3326  Graduate Course  4

* ENGW3315 is an acceptable substitution for engineering majors.

English course prefixes have changed from ENGL to ENGW. ENGW1111 is equivalent to ENGL1111. ENGW3302 is equivalent to ENGL3302. Effective Fall 2014, the ENGW 3301 course number will be retired. Students may take ENGW 3302 or ENGW 3315 to fulfill their Advanced Writing in the Technical Professions requirement. ENGW 3301 will still count towards the Advanced Writing in the Technical Professions requirement if the course was taken prior to Fall 2014.

NU Core Elective Requirements: 2 required: (one Arts Lvl 1 OR one Humanities Lvl 1) AND (one Social Science Lvl 1)

Technical Elective Requirements: 4 EECE technical electives. (EECE3392-EECE4626), (EECE4630-EECE4698), EECE4993, (EECE5576-EECE5698), ENGR4608, ENGR5670

2 CS courses from the following approved list may be taken toward the EECE technical elective requirement:
Approved List: CS3200, CS3500, CS3540, CS3700-CS3800, CS4100-4650, CS4740-CS4850, CS5010-CS5610, CS5650-CS5850, IS4200, IS4300, IS4700

Please contact advising@ccs.neu.edu to discuss your background if you do not meet the course pre-reqs. General Elective Requirements: 3 required - Any 4 SH course that is not remedial or repetitive. Please see your advisor if you have any questions.

Note: AP credit for MATH2280 will substitute for MATH3081 requirement. (effective Fall 2010)

Note: MATH1215, CS1100 will not substitute toward general elective requirements. Please check with your advisor when taking a general elective in overlapping disciplines.

The registrar’s website provides a listing of degree requirements and the DARS system provides a degree audit utility for students.

Effective SP15: If MATH2310 has not been taken, please replace with CS1800/1801.

Note: Some course numbers and titles have been changed. Here is a list of equivalencies for all majors:
EECE2412/2413 - Electronics 1 and Lab. = EECE2412/2413 - Fundamentals of Electronics and lab
EECE2410/2411 - Linear Circuits and Intro to ECE lab = EECE2150/2151 - Circuits/Signals: Biomed Applications
EECE2322/2323 - Digital Logic Design = EECE2322/2323 - Fundamentals of Digital Design
EECE3464 - Linear Systems = EECE2520 - Fundamentals of Linear Systems
EECE3440/3441 = Electromagnetics Fields & Waves and Lab = EECE2530/2531 - Fundamentals of Electromagnetics and lab.
EECE4628 - Computer Networks = EECE2540 - Fundamentals of Networks
EECE3326- Optimization Methods = EECE2560 - Fundamentals of Algorithms

NOTES:

Students interested in following for the BS/MS program should plan on following the BB pattern of attendance

Freshman coursework must be completed with a minimum GPA of 3.4 to join the program.

Students will be required to meet with an undergraduate advisor and a graduate advisor to petition to enter the program.

Students are encouraged to meet with their financial aid counselor and a customer service representative to review any financial questions.

BS/MSECE program is 9.5 semesters of coursework.

Students who opt out of the MSECE part of the program will still need to complete the Spring semester of the fifth year to finish the capstone design project.