Table A.2d
ECE *with Concentration in ML* and COMPSCI Second Major (matric ≥ 2021)

First Year	
Fall Semester	**Spring Semester**
EGR 101L Engineering Design & Communication	ECE 110L Fundamentals of ECE
Math 111L Introductory Calculus I	Math 112L Introductory Calculus II
EGR 103L Computational Methods in Engineering[1]	Physics 151L Introductory Mechanics[3]
Writing 101 / Chem 101DL Core Concepts in Chemistry[2]	Chem 101DL Core Concepts in Chemistry / Writing 101
Sophomore Year	
Fall Semester	**Spring Semester**
ECE 280L Signals and Systems	ECE 250D Computer Architecture
Math 218-2 Matrices and Vectors	Math 219 Multivariable Calculus
COMPSCI 201 Data Structures and Algorithms	Statistics Elective[4]
Physics 152L Intro Electricity, Magnetism, Optics[3]	Social Science or Humanities Elective 2
Social Science or Humanities Elective 1	
Junior Year	
Fall Semester	**Spring Semester**
ECE 230L / ECE 270DL	ECE 230L / ECE 270DL
ECE 480 Applied Prob. for Statistical Learning (ECE Concentration Elective/ML1)	ECE 580 Introduction to Machine Learning (ECE Elective/ML2)
COMPSCI 310 Operating Systems	COMPSCI 307D or 308 (Adv.) Soft Design & Implement
Math 353 Ordinary & Partial Differential Equations	ECE 350L Digital Systems
Social Science or Humanities Elective 3	
Senior Year	
Fall Semester	**Spring Semester**
ECE Digital Systems Elective (ML3)[5]	COMPSCI Elective (ML5)[8]
ECE Extension Elective (ML4)[6] or ECE/COMPSCI Design Elective[7]	ECE Extension Elective (ML4) or ECE/COMPSCI Design Elective
COMPSCI 330 Design & Analysis of Algorithms	Free Elective
Social Science or Humanities Elective 4	Social Science or Humanities Elective 5

1. Students who place into CompSci 201 are not required to take EGR 103L.
2. AP credit for Chem 20 or 21 is also acceptable.
3. See also the Physics requirements.
4. Statistics Elective selected from the list of approved Statistics electives, found in Appendix E.
5. ECE Digital Systems Elective: From list of approved Digital Systems Concentration courses, with ML focus (e.g., ECE 661).
6. ECE Extension Elective: One of ECE 588, 661, 682D, 685D, 687D, or ECE 590 with ML focus (w/ approval)
7. Approved ECE/COMPSCI Design Elective: Approved ECE/COMPSCI Design Elective taken after meeting all Math, Science, and ECE Core curriculum requirements. In addition, each approved design elective has one or more pre-requisite upper-level ECE courses. The elected design course may not simultaneously also count as an ECE Concentration Elective, ECE Extension Elective or ECE Elective. See Appendix E for a list of all currently approved Design courses.
8. COMPSCI Elective: One of CS 371, CS 527, CS 571, or CS 671D.