# **ENGINEERING PHYSICS**

## DIGITAL ELECTRONIC SYSTEMS CONCENTRATION

Information appearing in this guide is subject to change. Please talk with your departmental adviser about degree requirements on a regular basis.

tresnman ye	ear – taii nours
CHEM 150	Chemistry for Engineers** 5
ENGL 101	Composition (or any KU Core GE 2.1) 3
MATH 125 <sup>H</sup>	Calculus I 4
PHSX 150	Seminar in Phys., Astr., & Engineering Physics5
	KU Core Elective* H
	TOTAL HOURS 15.5
freshman ye	ear – spring
EECS 168 <sup>H</sup>	Programming I 4
ENGL 102 <sup>H</sup>	Critical Reading & Writing (or any KU Core GE 2.1)
MATH 126 <sup>H</sup>	Calculus II
PHSX 211	General Physics I, and 4
PHSX 216	General Physics I Laboratory I
-or-	
PHSX 213	General Physics I Honors5
	TOTAL HOURS 16
sophomore	year – fall
EECS 211	Circuits I
EECS 140 <sup>H</sup>	Introduction to Digital Logic Design 4
MATH 127 <sup>H</sup>	Calculus III 4
MATH 290 <sup>H</sup>	Elementary Linear Algebra 2
PHSX 212	General Physics II, and
PHSX 236	General Physics II Laboratory I
-or-	
PHSX 214	General Physics II Honors 4
	TOTAL HOURS 16
sophomore	year – spring
EECS 212	Circuits II
EECS 268	Programming II
MATH 220 <sup>H</sup>	Applied Differential Equations, or
MATH 320	Elementary Differential Equations
PHSX 313	General Physics III
PHSX 316	Intermediate Physics Lab
1110/0010	KU Core Elective* H
	TOTAL HOURS18
	101AL 1100N3 10

junior year -	- fall hours
EECS 312	Electronic Circuits I
EECS 360	Signal & System Analysis 4
EECS 388	Computer Systems & Assembly Language 4
EPHX 521	Mechanics I
	KU Core Elective* H 3
	TOTAL HOURS 17
junior year -	- spring
EECS 443	Digital Systems Design 4
<b>EECS 448</b>	Software Engineering I
EECS 461	Probability & Statistics
EPHX 511	Introductory Quantum Mechanics
	KU Core Elective* H
	TOTAL HOURS 17
senior year -	- fall
EECS 470	Electronic Devices & Properties of Materials 3
EECS 541	Computer Systems Design Lab I
	EECS Elective**
EPHX 516	Physical Measurements 4
EPHX 531	Electricity & Magnetism
	TOTAL HOURS 16
senior year -	- spring
EECS 542	Computer Systems Design Lab II
EECS 645	Computer Architecture
EPHX 601	Design of Physical and Electronic Systems 4
	KU Core Elective* H
	TOTAL HOURS 16

#### **CURRICULUM NOTES**

# ENGINEERING PHYSICS: DIGITAL ELECTRONIC SYSTEMS

## **KU CORE DISTRIBUTION**



CRITICAL THINKING & QUANTITATIVE LITERACY

GE 1.1 CRITICAL THINKING: PHSX 211
GE 1.2 QUANTITATIVE LITERACY: MATH 125





GE 2.1 WRITTEN COMMUNICATION: MEET VIA KU CORE REQUIREMENTS

GE 2.2 ORAL COMMUNICATION: MEET VIA KU CORE REQUIREMENTS

### BREADTH OF KNOWLEDGE



GE 3H ARTS & HUMANITIES:

I COURSE FROM KU CORE LIST

GE 3N NATURAL SCIENCES: CHEM 150

GE 3S SOCIAL SCIENCES: MEET VIA KU CORE REQUIREMENTS



**CULTURE & DIVERSITY** 

AE 4.1 DIVERSITY IN UNITED STATES: MEET VIA KU CORE REQUIREMENTS

AE 4.2 GLOBAL AWARENESS: MEET VIA KU CORE REQUIREMENTS



SOCIAL RESPONSIBILITY & ETHICS

AE 5 ETHICS & SOCIAL RESPONSIBILITY: PHSX 216, 316 AND EPHX 516 (pending approval)



INTEGRATION & CREATIVITY

AE 6 CAPSTONE: PHSX / EPHX 601

ENGINEERING PHYSICS SPECIFIC GENERAL EDUCATION REQUIREMENTS: When not specified visit kucore.ku.edu/courses for approved courses and activities.

<sup>\*</sup> Students must ensure the electives they choose fulfill all remaining KU Core requirements.

<sup>\*\*</sup>Allowed courses are EECS 546, EECS 644, EECS 670, EECS 690 or EECS 713.

<sup>\*\*\*\*</sup>CHEM 130H can be substituted for CHEM 150.

<sup>&</sup>lt;sup>H</sup> Honors equivalent course is available.