

School of Engineering and Engineering Technology
ELECTRICAL & COMPUTER ENGINEERING, B.S.
COMPUTER CONCENTRATION (ECCP)

2024-25

SUGGESTED COURSE SEQUENCE

First Semester - Fall

16 Hours

___	BIBL	1033	3	Biblical Literature
___	CPGR	2102	2	Intro to Computer Engineering (Fall only)
___	ENGL	1013	3	English Composition I
___	ENGR	1311	1	Manufacturing Processes Lab
___	ENGR	1513	3	Intro to Engineering Practice I (Fall only)
___	LETU	1101	1	Cornerstones of Life & Learning
___	MATH	1903	3	Calculus I ⁽¹⁾

Second Semester - Spring

16 Hours

___	ENGL	1023	3	English Composition II
___	ENGR	1523	3	Intro to Engineering Practice II (Spring only)
___	MATH	2013	3	Calculus II ⁽¹⁾
___	PHYS	2011	1	University Physics I Lab (Spring only)
___	PHYS	2013	3	University Physics I (Spring only)
___	THEO	2043	3	Biblical Theology for the Christian Life

Third Semester - Fall

17 Hours

___	COSC	1303	3	Computer Science I
___	EEGR	2051	1	Circuits & Measurements Lab ⁽¹⁾
___	EEGR	2053	3	Electric Circuits ⁽¹⁾
___	MATH	2203	3	Differential Equations
___	PHYS	2021	1	University Physics II Lab (Fall only)
___	PHYS	2023	3	University Physics II (Fall only)
___			3	Civic Engagement Elective

Fourth Semester - Spring

15 Hours

___	COSC	2103	3	Computer Science II
___	EEGR	2163	3	Advanced Circuits ⁽¹⁾ (Spring only)
___	EEGR	3213	3	Digital Electronics
___	ENGR	2023	3	Introduction to Mechanics ⁽¹⁾
___	ENGR	2400	0	Sophomore Design Seminar (Spring only)
___	MATH	2003	3	Discrete Mathematics

Fifth Semester - Fall

15 Hours

___	COMM	1113	3	Intro to Speech Communication
___	COSC	2203	3	Data Structures
___	CPGR	4233	3	Intro to Microprocessors/computers (Fall only)
___	EEGR	3243	3	Electronics and Lab (Fall only)
___	MATH	2303	3	Linear Algebra

Sixth Semester - Spring

16 Hours

___	BUSI	3023	3	Entrepreneurship for Engineers ⁽²⁾
___	CPGR	4253	3	Microcomputer Design (Spring only)
___	EEGR	4283	3	Digital Signal Processing (Spring only)
___	ENGR	2704	4	Project Mgmt, Design & Entrepreneurship
___	MATH		3	Math Elective ⁽³⁾

Seventh Semester - Fall

16 Hours

___	BIBL		3	Biblical Engagement Elective
___	CHEM	1111	1	General Chemistry I Lab
___	CHEM	1113	3	General Chemistry I
___	COSC	3603	3	Networks & Data Communications (Fall only) ⁽⁴⁾
___	ENGR	4813	3	Senior Design I (Fall only)
___	MATH	3403	3	Statistics

Eighth Semester - Spring

15 Hours

___	ENGR	4823	3	Senior Design II (Spring only)
___	THEO		3	Theological Engagement Elective
___			3	Civic Engagement Elective
___			3	Humanities & Fine Arts Elective
___			3	Technical Elective ⁽⁵⁾

TOTAL HOURS 126

1: Minimum grade of 'C' required.

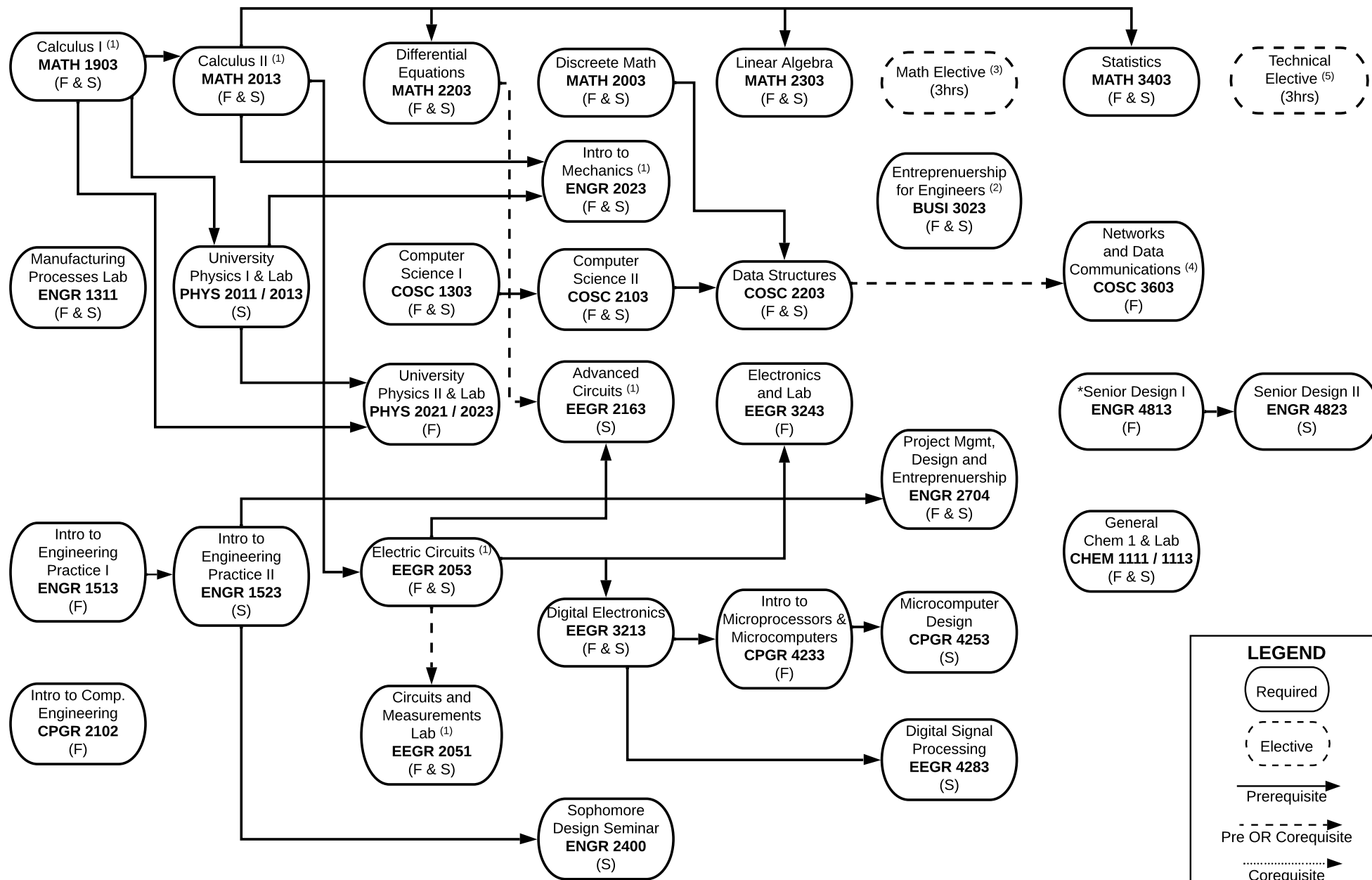
2: ENGR 6223 Advanced Engineering Mathematics recommended if considering engineering graduate school.

3: MATH 3453, 4233, 4253, 4403 or 4513

4: COSC 3303 Computer Architecture (Spring only) or COSC 3503 Operating Systems (Spring only) may be substituted for COSC 3603.

5: Any approved engineering course or computer science course

FRESHMAN		SOPHOMORE		JUNIOR		SENIOR	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	Spring



LEGEND

- Required (solid rounded rectangle)
- Elective (dashed rounded rectangle)
- Prerequisite (solid arrow)
- Pre OR Corequisite (dashed arrow)
- Corequisite (dotted arrow)
- (F) = Fall Only
- (S) = Spring Only

1. Minimum grade of 'C' required.
 2. ENGR 6223 Advanced Engineering Mathematics recommended if considering engineering graduate school.
 3. MATH3453, 4233, 4253, 4403, or 4513
 4. COSC3303 Computer Architecture (Spring only) or COSC3503 Operating Systems (Spring only) may be substituted for COSC3603
 5. Any approved engineering course or COSC course.

* Senior standing, completion of junior courses in concentration, and consent of instructor required.