UCO BS Electrical Engineering

These courses have *prerequisites*. To make sure you meet the prerequisites look in the Course Catalog.

Year 1 Fall	Year 1 Spring	Year 2 Fall	Year 2 Spring	Year 3 Fall	Year 3 Spring	Year 4 Fall	Year 4 Spring
1 MATH 2313 Calculus 1 — CC/Quant	5 MATH 2323 Calculus 2 — 1	8 MATH 2333 Calculus 3 — 5	13 MATH 2343 Calculus 4 — 8	19 PHY 3883 Math Physics I — 10,13	25 ENGR 3183 EM Fields I — 19, A	31 ENGR 4872 EE Senior Design I — 20,23,24,26,34C,S,P,A	36 ENGR 4892 Senior Design II — 31,S, A
2 PHIL 2313 Engineering Ethics — CC/Crit	6 PHY 2014 PSE I & Lab — CC/Quant — 5C	9 ENGR 2033 Statics — 6,8C	14 MATH 3103 Differential Equation — 13C,P	20 ENGR 3403 Analog Elec. — 17,18	26 ENGR 3323 Sig. and Sys. — 14,17,18, A	32 ENGR 4333 Dig Sig. Proc. — 26, A	HIST 1483/1493 History of US — CC/Hist
3 ENGR 1112 Intro. to Engr. & Lab	7 ENGR 1213 Engr. Comput. & Lab — CC/Life	10 PHY 2114 PSE II & Lab — 6,8C	15 PHY 3103 Mod. Phys. — 10,13C	21 ENGR 3421 Analog Elec. Lab — 20C	27 ENGR 3331 Sig. and Sys. Lab — 26C	33 ENGR 4351 Dig Sig. Proc. Lab — 32C	FMKT 2323 Global Div/Prot or Foreign Language — CC/Cult
4 BIO 1114 Gen. Bio. — CC/Quant	MCOM 1113 Fund. of Speech — CC/Comm	HLTH 1112 Health Life Skills — CC/Life	16 ENGR 3703 Comp. Meth. Engr — 6,7,14C	22 ENGR 3413 Material Science — 10,11, 14C A	28 ENGR 3613 Microprocessors & Lab — 17,18,24	ECON 1103 Intro. to Econ. — CC/Soc	37 ENGR 4323 Digital & Analog Comm. — 26, A
ENG 1113 English Comp. — CC/Comm	ENG 1213 English Comp. Res. — CC/Comm	11 CHEM 1315 Chem. for Engr. and Lab	17 ENGR 2303 Electrical Science — 10,18C	23 ENGR 3303 Engr. Prob. & Stat. — 17,18	29 ENGR 3803 Elect. Power System — 13,17,18	34 ENGR 4803 Mechatronics & Lab — 26,27, A	POL 1113 Am. Nat. Govt. — CC/Hist
		or					
		CHEM 1103 General Chem. I	18 ENGR 2311 Electrical Science Lab — 17C	24 ENGR 3223 Digital Logic Design & Lab — 17,18, A	30 HUM 2113/2223 Humanities — CC/Crit	35 ENGR 4xx3 Elective	
		CHEM 1112 Gen. Chem. I Rec/Lab					
		and					
		CHEM 1223 General Chem. II					
		CHEM 1232 Gen. Chem. II Rec/Lab					
15 hrs.	16 hrs.	17 hrs.	16 hrs.	16 hrs.	16 hrs.	15 hrs.	14 hrs.

Core Curriculum

CC/Comm	Written and Oral Communication
CC/Crit	Critical Inquiry Aesthestic Analysis
CC/Cult	Cultural and Language Analysis
CC/Hist	Historical and Political Analysis
CC/Life	Life Skills
CC/Quant	Quantitative Reasoning/Sci. Method
CC/Soc	Social and Behavioral Analysis

Fall and Spring

Fall or Spring

C: Concurrent Enrollment

P: Permission Required

J: Junior Standing

S: Senior Standing

A: Admission to EP and BME Programs

Electives

Students must pick one elective from the groups below. They may choose additional electives to specialize in a particular area of interest or pick additional electives from other groups to create a more balanced resume.

Photonics and Solid State Elective Group

50 ENGR 4263 Engineering Optics (10)

51 ENGR 4613 Photonics (15, 50)

52 ENGR 4633 Solid State Device (15,20,25)

53 ENGR 4183 Electromagnetic Fields II (25)

IoT Elective Group

60 ENGR 4243 IoT Systems & Lab (24,28)

61 ENGR 4253 Cybersecurity for IoT Devices & Lab (26)

Control Systems Elective Group

70 ENGR 4303 Control Systems (30,31)

71 ENGR 4403 Adv. Control Systems Design & Lab (70)

26 Mar 2021