

UCO BS Engineering Physics - Physics

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

Year 1		Year 2		Year 3		Year 4	
Fall	Spring	Fall	Spring	Fall	Spring	Fall	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 3443 Fluid Mechanics 14,20,A	31 ENGR 4852 EP Senior Design I 22,S,P,A	35 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 2203 Thermodynamics 9,11,14C,J	26 ENGR 3183 EM Fields I 19,A	32 ENGR/PHY 4000 Elective	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 ENGR 2043 Dynamics 9,13C	21 ENGR 3703 Comp. Meth. Engr. 6,7,14C	27 ENGR 3323 Sig. and Sys. 14,16,17	ECON 1103 Intro. to Econ. CC/Soc	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 2303 Electrical Science 10, 17C	22 ENGR 3303 Engr. Prob. & Stat. 16C,17C	28 ENGR 3331 Sig. and Sys. Lab 27C	33 PHY 4000 Elective	HUM 2113/2223 Humanities CC/Crit
ENG 1113 English Comp. CC/Comm	ENG 1213 English Comp. Res. CC/Comm	11 CHEM 1315 Chem. for Engr. and Lab or	17 ENGR 2311 Electrical Science Lab 16C	23 ENGR 3403 Analog Elec. 16,17	29 ENGR 4263 Engineering Optics 10,J	34 ENGR Elective	36 PHY 4203 Quantum Mech. 14,18
Core Curriculum		CHEM 1103 General Chem. I		18 PHY 3103 Mod. Phys. 10,14C		POL 1113 Am. Nat. Govt. CC/Hist	
CC/Comm Written and Oral Communication		CHEM 1112 Gen. Chem. I Rec/Lab		and		IoT Elective Group	
CC/Crit Critical Inquiry Aesthetic Analysis		CHEM 1223 General Chem. II		CHEM 1232 Gen. Chem. II Rec/Lab		60 ENGR 4243 IoT Systems & Lab (24,28)	
CC/Cult Cultural and Language Analysis		CHEM 1232 Gen. Chem. II Rec/Lab		Physics Grad School Elective Group		61 ENGR 4253 Cybersecurity for IoT Devices & Lab (26)	
CC/Hist Historical and Political Analysis		Physics Legend		40 PHY 4003 Mathematical Physics II (14, 19)		Computational and Materials Elective Group	
CC/Life Life Skills		■ Fall and Spring		41 PHY 4163 Analytical Mechanics (19)		70 ENGR 2143 Strength of Materials	
CC/Quant Quantitative Reasoning/Sci. Method		■ Fall or Spring		42 PHY 4173 Classical Mechanics (41)		71 ENGR 2151 Strength of Materials Lab	
CC/Soc Social and Behavioral Analysis		C: Concurrent Enrollment		43 PHY 4403 Solid State Physics (10)		72 ENGR 3413 Materials Science (10, 11, 14C, A)	
P: Permission Required		J: Junior Standing		Control Systems Elective Group		72 ENGR 4103 Finite Element Analysis (70, 71, 19C, 21)	
S: Senior Standing		A: Admission to Upper Division		50 ENGR 3223 Digital Logic Design & Lab (16, 17)		Photonics and Solid State Elective Group	
15 hrs.		16 hrs.		51 ENGR 3613 Microprocessors & Lab (50)		81 ENGR 4613 Photonics (15, 29)	
17 hrs.		16 hrs.		52 ENGR 4303 Control Systems (27, 28)		82 ENGR 4633 Solid State Device (15, 20, 25)	
16 hrs.		16 hrs.		53 ENGR 4403 Adv. Control Systems Design & Lab (52)		83 ENGR 4183 Electromagnetic Fields II (25)	
16 hrs.		13 hrs.		53 ENGR 4803 Mechatronics & Lab (27, 28)		14 hrs.	
17 hrs.		17 hrs.		17 hrs.		17 hrs.	