

2023 ELECTRICAL ENGINEERING: Power and Renewable Energy Track
COLLEGE OF ENGINEERING & COMPUTER SCIENCE

DEGREE REQUIREMENT CHECKSHEET
UNIVERSITY OF CENTRAL FLORIDA

GENERAL EDUCATION PROGRAM				LOWER AND JUNIOR LEVEL REQUIRED COURSES			SH	Grd	Trans Equiv
* Indicates "C-" minimum required by the Gordon Rule				EGS 1006C Introduction to the Engineering Profession			1	#	
** Indicates minimum "C" or better grade				EGN 1007C Engineering Concepts and Methods			1	#	
COMMUNICATION (9 SEM HRS)				STA 3032 Probability & Statistics for Engineers			GEP		
	SH	Grd	Trans Equiv	PHY 3101 General Physics Using Calculus III			3		
ENC 1101	3	*		EEL 3926L Junior Design			1		
ENC 1102	3	*		EGN 3211 Engineering Analysis & Computation			3	**	
SPC 1603C	3			EEL 3004C Linear Circuits I			3	**	
CULTURAL & HISTORICAL (9 SEM HRS)				EEL 3123C Linear Circuits II			3	**	
Select 2: AMH 2010, EUH 2000, EUH 2001, HUM 2211, HUM 2230, WOH 2012, WOH 2022				EEE 3307C Electronics I			4		
Approved Cultural Foundations course:				EEE 3342C Digital Systems			3	**	
SOCIAL FOUNDATION - (6 SEM HRS)				EEL 3801C Computer Organization			4	**	
ANT 2000/ PSY 2012/ SYG 2000				EEL 3657 Linear Control Systems			3		
ECO 2013 <u>or</u> ECO 2023									
SCIENCE - 6 SH				JUNIOR LEVEL ELECTIVE COURSES (CHOOSE 2)			SH	Grd	Trans Equiv
GEO 1200 <u>or</u> GEO 2370 (either GEO is preferred) <u>or</u> BSC 1050C <u>or</u> BSC 1005C <u>or</u> GLY 1030				EEL 3470 Electromagnetic Fields			3		
PHY 2048C General Physics Using Calculus I				EEL 3552C Signal Analysis & Communication			4		
MATHEMATICAL - 6 SH				EEE 3350 Semiconductor Devices			3		
MAC 2311C				EEL 3290 Global Energy Issues			3		
STA 3032 Probability & Statistics for Engineers				SENIOR LEVEL REQUIRED COURSES			SH	Grd	Trans Equiv
GPA Gen Ed Prog =				EEL 4216 Fundamentals of Electric Power Systems			3		
ENGINEERING CORE**				EEL 4742C Embedded Systems			3		
MAC 2311C Calculus with Analytic Geometry I				RECOMMENDED SENIOR LEVEL ELECTIVE COURSES			SH	Grd	Trans Equiv
MAC 2312 Calculus with Analytic Geometry II				(CHOOSE MINIMUM 3 FROM LIST)					
MAC 2313 Calculus with Analytic Geometry III				EEL 4612C Introduction to Modern & Robust Control			4		
MAP 2302 Ordinary Differential Equations I				EEL 4750 Digital Signal Processing Fundamentals			3		
CHS 1440 Principles of Chemistry (or CHM 2045C)				EEL 4294 Introduction to Smart Grids			3		
PHY 2048 & PHY 2048L General Physics Using Calculus I & Lab				EEL 4205 Electric Machinery			3		
PHY 2049 & PHY 2049L General Physics Using Calculus II & Lab				EEL 5185 Systems Identification			3		
SUBTOTAL SEM HRS				EEL 5268 Communications and Networking for Smart Grid			3		
				EEL 5291 Distributed Control and Optimization for Smart Grid			3		
				EEL 5173 Linear Systems Theory			3		
				EEL 5255 Advanced Power Systems Analysis			3		
				EEL 5245 Power Electronics I			3		
				REQUIRED					
				<i>Technical Electives (EEE or EEL 4XXX or 5XXX)</i>			15	~	
				EEL 4914 Senior Design I			3		
				EEL 4915L Senior Design II			3		
				SUBTOTAL SEM HRS			71		
				GPA Engr Option =					
				(2.250 minimum)					
** A Grade of C (2.00) or higher required				ADVISOR COMMENTS:					
* Transfer students please see your faculty advisor before registering for these classes.				~BS-MS students should choose (3 SH) 5000 level courses as electives.					