

2020 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)		SH	Grd	Trans Equiv	STA 3032 Probability & Statistics for Engineers			GEP		
ENC 1101		3	*		PHY 3101 General Physics Using Calculus III			3		
ENC 1102		3	*		EEL 3926L Junior Design			1		
SPC 1603C		3			EGN 3211 Engineering Analysis & Computation			3	**	
CULTURAL & HISTORICAL (9 SEM HRS)				EEL 3004C Linear Circuits I			3		**	
Select 2: AMH 2010, EUH 2000, EUH 2001, HUM 2211, HUM 2230, WOH 2012, WOH 2022		6	*		EEL 3123C Linear Circuits II			3	**	
Approved Cultural Foundations course:		3			EEE 3307C Electronics I			4		
SOCIAL FOUNDATION - (6 SEM HRS)				EEE 3342C Digital Systems			3		**	
ANT 2000/ PSY 2012/ SYG 2000		3			EEL 3801C Computer Organization			4	**	
ECO 2013 <u>or</u> ECO 2023		3			EEL 3657 Linear Control Systems			3		
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		3			EEL 3470 Electromagnetic Fields			3		
PHY 2048C General Physics Using Calculus I		4			EEL 3552C Signal Analysis & Communication			4		
MATHEMATICAL - 6 SH				EEE 3350 Semiconductor Devices			3			
MAC 2311C		4	**		EEL 3290 Global Energy Issues			3		
STA 3032 Probability & Statistics for Engineers		3			SENIOR LEVEL REQUIRED COURSES			SH	Grd	Trans Equiv
GPA Gen Ed Prog =		36			EEL 4216 Fundamentals of Electric Power Systems			3		
ENGINEERING CORE**		SH	Grd	Trans Equiv	RECOMMENDED SENIOR LEVEL ELECTIVE COURSES			SH	Grd	Trans Equiv
MAC 2311C Calculus with Analytic Geometry I		GEP	**		(CHOOSE MINIMUM 3 FROM LIST)					
MAC 2312 Calculus with Analytic Geometry II		4	**		EEL 4612C Introduction to Modern & Robust Control			4		
MAC 2313 Calculus with Analytic Geometry III		4	**		EEL 4750 Digital Signal Processing Fundamentals			3		
MAP 2302 Ordinary Differential Equations I		3	**		EEL 4294 Introduction to Smart Grids			3		
CHS 1440 Principles of Chemistry (or CHM 2045C)		4	**		EEL 4205 Electric Machinery			3		
PHY 2048C General Physics Using Calculus I		GEP	**		EEL 5185 Systems Identification			3		
PHY 2049C General Physics Using Calculus II		4	**		EEL 5268 Communications and Networking for Smart Grid			3		
SUBTOTAL SEM HRS		19			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						
				Technical Electives (EEE or EEL 4XXX or 5XXX)			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

Transfer students please see your faculty advisor before registering for these classes.

ADVISOR COMMENTS:

~BS-MS students should choose (3 SH) 5000 level courses as electives.