

**2023 ELECTRICAL ENGINEERING: Communications and Signal Processing Track**

**DEGREE REQUIREMENT CHECKSHEET**

**COLLEGE OF ENGINEERING & COMPUTER SCIENCE**

**UNIVERSITY OF CENTRAL FLORIDA**

<b>GENERAL EDUCATION PROGRAM</b>				<b>LOWER AND JUNIOR LEVEL REQUIRED COURSES</b>			
* 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	#	
<b>COMMUNICATION (9 SEM HRS)</b>	<b>SH</b>	<b>Grd</b>	<b>Trans Equiv</b>	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	**	
<b>CULTURAL &amp; HISTORICAL (9 SEM HRS)</b>				EEL 3021 Introduction to Applied Randomness for Engineers	3		
Select 2: AMH 2010, EUH 2000, EUH 2001, HUM 2211, HUM 2230, WOH 2012, WOH 2022	6	*		EEL 3004C Linear Circuits I	3	**	
Approved Cultural Foundations course:	3			EEL 3123C Linear Circuits II	3	**	
<b>SOCIAL FOUNDATION - (6 SEM HRS)</b>				EEE 3307C Electronics I	4		
ANT 2000/ PSY 2012/ SYG 2000	3			EEE 3342C Digital Systems	3	**	
ECO 2013 or ECO 2023	3			EEL 3801C Computer Organization	4	**	
<b>SCIENCE - 6 SH</b>				EEL 3552C Signal Analysis & Analog Communication	4		
GEO 1200 or GEO 2370 (either GEO is preferred) or BSC 1050C or BSC 1005C or GLY 1030	3			<b>JUNIOR LEVEL ELECTIVE COURSES (CHOOSE 2)</b>			
PHY 2048C General Physics Using Calculus I	4			EEL 3470 Electromagnetic Fields	3		
<b>MATHEMATICAL - 6 SH</b>				EEL 3657 Linear Control Systems	3		
MAC 2311C Calculus with Analytic Geometry I	4	**		EEE 3350 Semiconductor Devices	3		
STA 3032 Probability & Statistics for Engineers	3			<b>SENIOR LEVEL REQUIRED COURSES</b>			
GPA Gen Ed Prog =	36			EEL 4750 Digital Signal Processing Fundamentals	3		
<b>ENGINEERING CORE**</b>				EEL 4515C Fundamentals of Digital Communication Systems	4		
MAC 2311C Calculus with Analytic Geometry I	GEP	**		EEL 4742C Embedded Systems	3		
MAC 2312 Calculus with Analytic Geometry II	4	**		<b>RECOMMENDED SENIOR LEVEL ELECTIVE COURSES</b>			
MAC 2313 Calculus with Analytic Geometry III	4	**		<b>(CHOOSE MINIMUM 2 FROM LIST)</b>			
MAP 2302 Ordinary Differential Equations I	3	**		EEL 4140C Analog Filter Design	4		
CHS 1440 Principles of Chemistry (or CHM 2045C)	4	**		EEL 4518 Satellite Communications	3		
PHY 2048 & PHY 2048L General Physics Using Calculus I & Lab	GEP	**		EEL 4781 Computer Communication Networks	3		
PHY 2049 & PHY 2049L General Physics Using Calculus II & Lab	4	**		EEE 5513 DSP Applications	3		
<b>SUBTOTAL SEM HRS</b>	<b>19</b>			EEE 5542 Random Processes I	3		
				EEE 5557 Introduction to Radar Systems	3		
				EEL 5432 Satellite Remote Sensing	3		
				EEL 5780 Wireless Networks	3		
				EEL 5820 Image Processing or its equivalent course from CS	3		
				EEL 5582 Fundamentals of Wireless Communication	3		
				EEL 5268 Communications and Networking for Smart Grid	3		
				<b>REQUIRED</b>			
				Technical Electives (EEE or EEL 4XXX or 5XXX)	10	~	
				EEL 4914 Senior Design I	3		
				EEL 4915L Senior Design II	3		
				<b>SUBTOTAL SEM HRS</b>	<b>71</b>		
				<b>GPA Engr Option = (2.250 minimum)</b>			
<b>** A Grade of C (2.00) or higher required</b>				<b>ADVISOR COMMENTS:</b>			
<b>* Transfer students please see your faculty advisor before registering for these classes.</b>				~BS-MS students should choose (3 SH) 5000 level courses as electives.			