TEMASEK POLYTECHNIC	WICHITA STATE UNIVERSITY
DIPLOMA IN MICROELECTRONICS	
Core Subjects	
GCD 1001: Applied Principles for Effective Living 1	Free elective
GCD 1002: Applied Principles for Effective Living 2	Free elective
GCD 1003: Applied Principles for Effective Living 3	Free elective
ECS 1003: Writing and Oral Presentation	ENGL 101: College English I
	*must validate with English Exit Exam 101
ECS 1004: Introduction to Effective	ENGL 102: College English II
Communication	*must validate with English Exit Exam 102
ECS 2003: Organisational Communication	Under evaluation
ECS 3002: Career Communication	ENGL 210: Composition: Business, Professional and
	Technical Writing
ESI 2001: Student Internship Programme	Free elective
Level 1	
EEE 1003: Digital Fundamentals 1	CS 194: Introduction to Digital Design
EEE 1001: Circuit Analysis	Engineering elective
EMA 1001: Engineering Mathematics 1	MATH 112: Precalculus Mathematics
EPL 1003: Problem-Solving and Process Skills	Free elective
EEE 1004: Digital Fundamentals 2	Free elective
EEE 1002: Electronic Devices and Circuits	EE 492: Electronic Circuits I
EMA 1002: Engineering Mathematics 2	MATH 242: Calculus I
ESE 1005: Computer Programming	Free elective
EED 1001: Electronic Prototyping	Free elective
EED 1002: Printed Circuit Board Design	Free elective
Level 2	
EMC 2001: Microcontroller Technology	Free elective
EMA 2001: Engineering Mathematics 3	MATH 555: Differential Equations I
EMI 2001: Semiconductor Physics and Devices	Engineering elective
EMI 2002: Wafer Fabrication Process Technology	Engineering elective
EMI 2003: Digital IC Design and Applications	Engineering elective
EMI 2007: Analog IC Design and Applications	Free elective
EMI 2005: IC Packaging and Failure Analysis	Free elective
EMI 2008: IC Process Integration	Free elective
ECT 2001: Circuits and Control Systems	EE 684: Introductory Control Systems Concepts
Level 3	
EMP 3001: Major Project	Free elective
EMI 3001: Microelectronics Test and	Free elective
Measurement	
Diploma Elective Subjects	
EMI 3004: Materials Science	Under evaluation

EMI 3005: Cleanroom Equipment and Technology	Under evaluation
EMI 3007: Nanotechnology	Under evaluation
EMI 3008: IC Layout and Physical Design	Free elective
EMI 3002: Display Technology	Free elective
Special Elective Subjects	
EED 3009: Special Project 1	Free elective
EED 3010: Special Project 2	Free elective
EED 3011: Higher Engineering Skills 1	Free elective
EED 3012: Higher Engineering Skills 2	Free elective
EMA 3001: Higher Engineering Mathematicss	MATH 243: Calculus II

Last updated: October 23, 2013