

RIT BS Microelectronic Engineering (MCEE) 3/18/2023

Year One		Year Two		Year Three-Spring	Year Four-Fall	Year Five		Total Credits
PB Calc I MATH-181 (4) All	PB Calc II MATH-182 (4) All	Mult & Vect Calc MATH-221 (4) All	Diff Eq MATH-231 (3) F,Sp	EM Fields MCEE-320 (3)Sp	Thin Films MCEE-503* (3)F	Sr. Design I MCEE-495 (3) F,Sp	Sr. Design II MCEE-496 (3) F,Sp	
General Chem for Engr CHMG-131 (3) F,Sp	University Physics I PHYS-211 (4) F,Sp	University Physics II PHYS-212 (4) F,Sp	Restricted STEM Elective (3) F,Sp	Semi Dev I EEEE-260 (3)F,Sp	Lith Mat MCEE-505* (3) F	CMOS IC MCEE-550 (4)F	Prof Elective MCEE-5XX (3)F, Sp	
Intro to NanoE MCEE-101* (1) F	Comp Prob Solv CMPR-271 (3) F,Sp	Stats DOE MCEE-205* (3) F	IC Tech MCEE-201* (3)Sp	Semi Proc Int MCEE-502* (3)Sp	Linear Sys EEEE-353 (4) F,Sp	Prof Elective MCEE-5XX (3)F, Sp	Prof Elective MCEE-5XX (3)F, Sp	
Writing Seminar UWRT-150 (3) F, Sp	Dig Sys I EEEE-120* (3) Sp	Ckts I EEEE-281* (3) F,Sp	Ckts II EEEE-282 (3) F,Sp	Digital Electronics EEEE-380* (3) F,SP	Analog Electronics EEEE-480* (4) F,SP	Open Elective- 1 xxxx-nnn (3) F, Sp	Open Elective- 2 xxxx-nnn (3) F, Sp	
RIT 365 YOPS 10 (0)F	Note: One General Education Course must be Writing Intensive		Wellness	Wellness			Open Elective- 3 xxxx-nnn (3) F, Sp	
Gen. Ed. - Elective xxxx-nnn (3) F, Sp		Co-op Prep Sem EGEN 99 (0) F, Sp						
Gen. Ed.- Artistic Persp. xxxx-nnn (3) F, Sp	Gen. Ed. - Ethical Persp. xxxx-nnn (3) F, Sp	Gen. Ed. - Global Persp. xxxx-nnn (3) F, Sp	Gen. Ed. - Social Persp. xxxx-nnn (3) F, Sp	Gen. Ed. - Immersion-1 xxxx-nnn (3) F, Sp	Gen. Ed. - Immersion-2 xxxx-nnn (3)F, SP	Gen. Ed. - Immersion-3 xxxx-nnn (3)F, Sp		
17	17	17	15	15	17	16	15	129

Legend	Professional Electives:	Restricted STEM Electives:
Math		
Comp Science		
Physics	EEEE-520 (Design of Digital Systems)	PHYS-213 (Modern Physics)
Chemistry	EEEE-587 (MEMS Evaluation),	MATH-241 (Linear Algebra)
Liberal Arts	EEEE-592 (Communication Networks)	MATH-251 (Probability & Statistics I)
Elect Engr	EEEE-610 (Analog Electronics Design)	CHMG-142 (General & Analytic Chemistry II)
Microelectroni Engr	EEEE-689 (Fundamentals of MEMS)	CHMG-201 (Introduction to Organic Polymer Technology)
Year One	EEEE-711 (Adv. Carrier Injection Devices)	BIOG-140 (Cell and Molecular Biology for Engineers I)
Restr STEM Elect	EEEE713 (Solid State Physics)	EEEE-220 (Digital Systems II)
Open Elective	IMGS 616 (Fourier Methods for Imaging)	
Co-op	IMGS-633 (Optics For Imaging)	
Course Name	ISEE-682 (Lean Six Sigma Fundamentals)	
Course #	MCEE 515 (Nanolithography Systems)	
Semesters	MCEE-520 (Photovoltaic Science & Engineering)	
* Indicates lab included	MCEE-704 (Physical Modeling of Semiconductor Devices)	
Prerequisites	MCEE-706 (SiGe Devices and Technology)	
	MCEE-713 (Physics of Nanostructures)	
	MCEE-770 (Microelectromechanical Systems)	
Course Prerequisites	<i>Professional Electives from other departments may be taken with permission of the Program Director.</i>	
Prerequisite		

Co-op Requirements: 48 Weeks
MCEE-499:
 Summer after 2nd year/ Fall of 3rd year
 Summer after 3rd year/ Spring of 4th year