

# RIT BS Microelectronic Engineering (MCEE)(Final Release 3/25/2025)

Year One		Year Two		Year Three-Spring	Year Four-Fall	Year Five		Total Credits
Calculus I MATH-181 (4) All	Calculus 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	Semi Dev I EEEE-260 (3)F,Sp	Restricted STEM Elective (3) F,Sp	Lith Mat MCEE-505* (3) F	CMOS IC MCEE-550 (4)F	Prof Elective MCEE-5XX (3)F, Sp	
Semiconductors & Microchips MCEE-101* (1) F	Comp Prob Solvr 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	Circuits I EEEE-281* (3) F,Sp	Circuits 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	Circuits I Recitation EEEE-281R (0) F, Sp	Wellness	Wellness				
Gen. Ed. – Elective xxxx-nnn (3) F, Sp		Co-op Prep Sem EGEN 99 (0) F, Sp					Open Elective-3 xxxx-nnn (3) 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

Chemistry

Liberal Arts

Elect Engr

Microelectronic Engr

Year One

Restr STEM Elect

Open Elective

Co-op

Course Name

Course #

Semesters

\* Indicates lab included

Prerequisites

A

Course

Prerequisites

A

Prerequisite

EEEE-520 (Design of Digital Systems)

EEEE-587 (MEMS Evaluation),

EEEE-592 (Communication Networks)

EEEE-610 (Analog IC Design)

EEEE-689 (Fundamentals of MEMS)

EEEE-711 (Adv. Carrier Injection Devices)

EEEE713 (Solid State Physics)

IMGS 616 (Fourier Methods for Imaging)

IMGS-633 (Optics For Imaging)

ISEE-682 (Lean Six Sigma Fundamentals)

MCEE 515 (Nanolithography Systems)

MCEE-520 (Photovoltaic Science & Engineering)

MCEE-704 (Physical Modeling of Semiconductor Devices)

MCEE-706 (SiGe Devices and Technology)

MCEE-713 (Physics of Nanostructures)

MCEE-770 (Microelectromechanical Systems)

PHYS-213 (Modern Physics)

MATH-241 (Linear Algebra)

MATH-251 (Probability & Statistics)

CHMG-142 (General & Analytic Chemistry II)

CHMG-201 (Introduction to Organic Polymer Technology)

BIOG-140 (Cell and Molecular Biology for Engineers I)

EEEE-220 (Digital Systems II)

Co-op Requirements: 48 Weeks

MCEE-499:

Summer after 2nd year/ Fall of 3rd year

Summer after 3rd year/ Spring of 4th year

Professional Electives from other departments may be taken with permission of the Program Director.