

SEMICONDUCTOR MANUFACTURING TECHNOLOGY - ASSOCIATE OF APPLIED SCIENCE DEGREE (AAS)

Explore More About This Program: <https://cwi.edu/program/semiconductor-manufacturing-technology>

Degree Plan: Fall Or Spring Start

The course sequence listed below is strongly recommended in order to complete your program requirements. Many Career and Technical Education (CTE) courses have prerequisites and/or corequisites that have been accounted for within this course sequence plan. Please register for each semester as shown using the Student Planning tool in myCWI. Consult your advisor for any questions regarding this course sequence plan.

First Year

Fall		Credit Hours
AMET 121	DC Circuits and Application	5
AMET 131	AC Circuits and Application	5
AMET 136	Industrial Tools and Fabrication	3
MATH 143	Precalculus I: Algebra (GEM 3) ¹	3
Total Semester Credit Hours		16

Spring

AMET 141	Analog Circuits and Application	5
AMET 151	Digital Circuits and Application	4
ENGL 101	Writing and Rhetoric I (GEM 1)	3
MATH 144	Precalculus II: Trigonometry ¹	2
Total Semester Credit Hours		14

Second Year

Fall		
Select one of the following options:		4
Option 1:		
CHEM 101	Introduction to Chemistry ²	
CHEM 101L	Introduction to Chemistry Lab ²	
Option 2:		
CHEM 111	General Chemistry I ²	
CHEM 111L	General Chemistry I Lab ²	
SMT 200	Programming for Semiconductor Manufacturing	2
SMT 210	Nanofabrication I	2
SMT 220	Quality Control and Statistical Processing	3
SMT 230	Automated Control Systems	3
Total Semester Credit Hours		14

Spring

COMM 101	Fundamentals of Oral Communication (GEM 2)	3
PHYS 111	General Physics I (GE Elective)	3

PHYS 111L	General Physics I Lab (GE Elective)	1
SMT 240	Vacuum Technology	2
SMT 250	Radio Frequency Energy and Plasma	2
SMT 260	Nanofabrication II	2
GEM 6 - Social & Behavioral Ways of Knowing course		3
Total Semester Credit Hours		16
Minimum Credit Hours Required		60

¹ Students who would prefer to complete their GEM 3 math requirement in a single semester by taking MATH 147 Precalculus instead of MATH 143 Precalculus I: Algebra and MATH 144 Precalculus II: Trigonometry are advised to complete their GEM 6 requirement in their first semester and MATH 147 in their second semester.

² Students who have prior experience with chemistry are strongly encouraged to take the Chemistry Placement exam at the CWI Assessment Center. Passing the Chemistry Placement exam will allow students to register directly into CHEM 111 General Chemistry I, which is the recommended Chemistry option for SMT majors.