

SEMICONDUCTORS (SMC)

SMC 1000 – Semiconductors 101

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Covers the manufacturing of semiconductor devices. Introduces semiconductor manufacturing and testing equipment.

Offered: Fall.

SMC 1100 – Vacuum and Gases

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 3.00 Lab Hours: 1.00

Covers the generation and testing of gases in a vacuum. Introduces equipment used in the semiconductor process.

Offered: Spring.

SMC 1200 – Introduction to Manufacturing

Credit Hours: 3.00 Total Contact Hours: 4.00 Lecture Hours: 2.00 Lab Hours: 2.00

Introduces print reading and part visualization from drawings, including sketching multi-view drawings and three-dimensional models, location of key features and dimensioning specifications. Students introduced to beginning concepts in geometric dimensioning and tolerancing. Instruction in using precision measurement tools including, but not limited to scales, calipers, micrometers, dial indicators, coordinate measurement machines. Students will incorporate use of computer interfaces in metrology and basic statistical process control and topics in lean manufacturing.

Offered: Fall.